Second Submission

Transportation Master Plan Update
Agerton Secondary Plan Area

February 2026 – Project No. 100242

Agerton New Urban Ltd.

TYLin

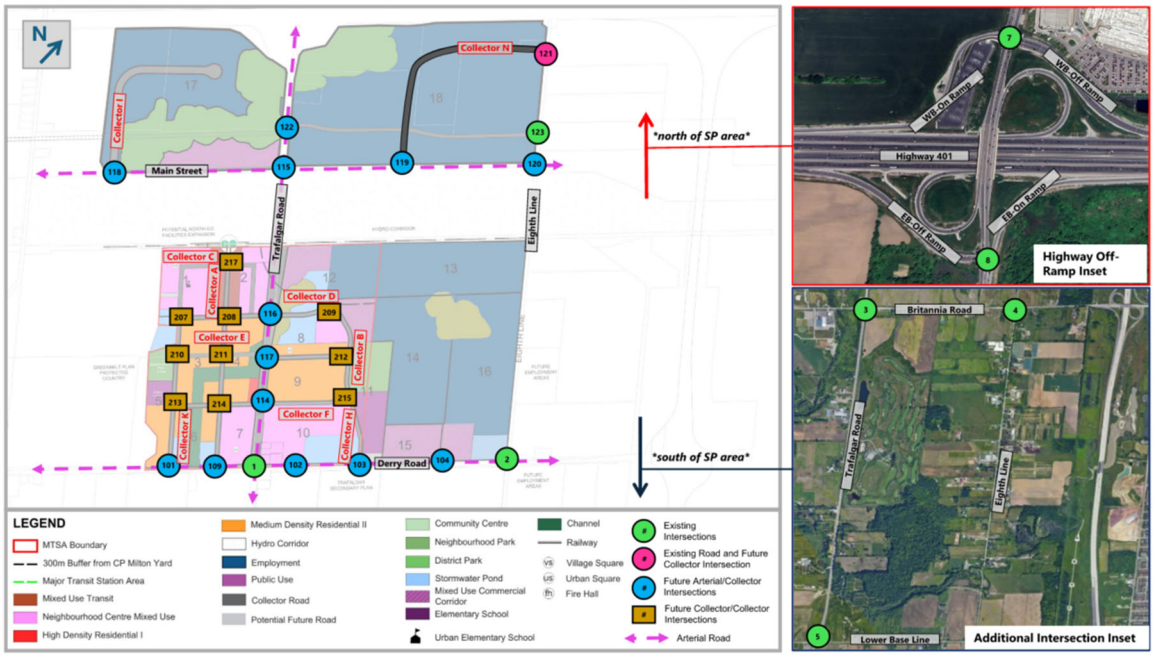
EXECUTIVE SUMMARY

T.Y. Lin International Canada Inc. (TYLin) was retained by the Agerton New Urban Ltd. Landowner's Group (MP4 Agerton) to provide advisory transportation planning and engineering services in support of the development of the Agerton lands within the broader Milton Phase 4 (MP4) area. The purpose of this Transportation Master Plan (TMP) Update is to update the previous 2022 TMP Addendum report completed by WSP – referred to as the TMP for the Trafalgar and Agerton Secondary Plan Areas. This report accounts for changes to the proposed land use density and road network modifications put forth by MP4 Agerton. The update will provide analysis for the 2031, 2041, and 2051 planning horizons, and the assessment of an ultimate 2051 horizon will align with the Region's TMP and activity-based model.

In consultation with Halton Region and Town of Milton staff, the following key intersections were identified for inclusion in the analysis:

- Trafalgar Road & Highway 401 Westbound On- and Off-Ramp (Existing, Signalized)
- Trafalgar Road & Highway 401 Eastbound Off-Ramp (Existing, Signalized)
- Trafalgar Road & Derry Road (Existing, Signalized)
- Trafalgar Road & Britannia Road (Existing, Signalized)
- Trafalgar Road & Lower Base Line (Existing, Signalized)
- Eighth Line & Britannia Road (Existing, Signalized)
- Eighth Line & Derry Road (Existing, Unsignalized)
- Trafalgar Road & Main Street (Future, Signalized)

Figure of Existing and Proposed Road Network Within Study Area



The Agerton Secondary Plan establishes a target of 14,100 residents and 17,500 jobs within the Secondary Plan area, with the Milton Trafalgar Major Transit Station Area (MTSA) identified as the highest-density, transit-oriented node centered on the future Milton Trafalgar GO Station.

Based on the Agerton Secondary Plan population and employment targets, TYLin adopted a set of secondary plan land uses and estimated site statistics, provided by SGL Planning & Design Inc. (SGL), for the purposes of trip generation estimates. MP4 Agerton adopted a preliminary phased build-out schedule for residential and employment land uses within the Agerton Secondary Plan, aligning with the Region's growth percentage projection estimates. The general site statistics adopted, per the full build-out 2051 scenario, are as follows:

- 7,132 Residential Units
- Commercial and Mixed Use G.F.A. of 2,233,000 ft^2
- Employment G.F.A. of 20,624,000 ft^2
- 1 Community Centre and Library with a combined G.F.A. of 142,000 ft^2
- 1 District Park
- 1 Elementary School (750 Students)

The Agerton Secondary Plan Area was divided into 18 Traffic Analysis Zones (TAZs) for the purposes of trip generation and assignment. The TAZ boundaries are generally defined by the collector road network and NHS features, conforming to the shape of future development blocks when possible.

Per the preparation of a scenario with the Trafalgar GO Station constructed, and a separate scenario without the Trafalgar GO Station, the following Agerton site trip totals were estimated under full build-out conditions for the 2051 horizon:

- With Trafalgar GO Station: A total of 6,021 net auto trips, consisting of 3,520 inbound and 2,501 outbound trips, are estimated to be generated by the Agerton Secondary Plan area under 2051 conditions during the weekday a.m. peak hour. During the weekday p.m. peak hour, 2,885 inbound and 3,945 outbound net auto site trips are predicted, totaling 6,830 trips.
- Without Trafalgar GO Station: A total of 6,591 net auto trips, consisting of 3,944 inbound and 2,647 outbound trips, are estimated to be generated by the Agerton Secondary Plan area under 2051 conditions during the weekday a.m. peak hour. During the weekday p.m. peak hour, 3,128 inbound and 4,195 outbound net auto site trips are predicted, totaling 7,323 trips.

Existing 2025 Conditions

Turning movement count traffic data was surveyed at the existing study area intersections during the a.m. and p.m. peak periods on Wednesday, May 28, 2025.

Under existing conditions, all study area intersections operate with overall reserve capacity and acceptable delays during both the weekday a.m. and p.m. peak hours, with some exceptions. Although select movements experience level-of-service (LOS) F, all movements operate with volume-to-capacity (v/c) ratios below 1.0 during both peak hours, indicating reserve capacity.

Future Background 2031 Conditions

Intersection / Road Improvement

HOV/Bus lanes are to be implemented on Trafalgar Road, Britannia Road, and Derry Road under future background and future total conditions upon Regional widening of Trafalgar Road and Derry Road to three lanes in each direction. Dedicated turn-lane installations are also planned at Trafalgar/Derry (northbound right, westbound right), Trafalgar/Britannia (northbound right, southbound right), Trafalgar/Lower Base Line (northbound right, southbound right), Eighth Line/Britannia (westbound right), and Eighth Line/Derry (eastbound right, westbound right).

Dual left-turn lanes are also recommended at the intersection of Trafalgar Road and Derry Road on the northbound, southbound, and eastbound approaches to accommodate background traffic growth.

Analysis Summary

Under 2031 future background conditions, all study area intersections are predicted to generally operate with overall reserve capacity and acceptable delays during both the weekday a.m. and p.m. peak hours, with some exceptions. Although some movements experience LOS F, the v/c ratio is less than 1.0 during both peak hours in most cases, indicating some reserve capacity. A small percentage of movements are projected to operate with v/c ratios over 1.0, largely coinciding with existing operational deficiencies.

Select movements are expected to queue beyond the proposed storage length. The southbound right movement at the intersection of Trafalgar Road and Derry Road and the westbound right movement at the intersection of Trafalgar Road and Highway 401 westbound on- and off-ramp were also previously identified under existing conditions to exceed the existing storage, demonstrating that it is an existing issue.

Future Background 2041 Conditions

Intersection / Road Improvement

To accommodate future background traffic, dual left-turn lanes are recommended in several locations, including the westbound approach of Derry Road at Trafalgar Road, the north- and southbound approaches of Trafalgar Road at Britannia Road, and at the southbound approach of Trafalgar Road at Lower Base Line.

The Main Street Extension from Fifth Line to Trafalgar Road has been included under the 2041 horizon year. At the time of this report, the EA is currently underway with construction anticipated to begin as early as 2027 between Fifth Line and Sixth Line. As for the construction of Main Street from Sixth Line to Trafalgar Road, no construction timeline has been announced as it is currently in the post period. For the purposes of this analysis, it is assumed that the Main Street Extension from Sixth Line to Trafalgar Road will be constructed and operational under the 2041 horizon year.

Analysis Summary

Under 2041 future background conditions, the study area intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception for the critical movements that were identified under 2031 future background conditions.

Future Background 2051 Conditions

Intersection / Road Improvement

Localized widening of Lower Base Line to four lanes (two lanes in each direction) is expected to be implemented within the 2051 horizon, as proposed by the Town of Milton in Figure 4 – Proposed Road Network (Town-wide) of the Milton TMP Update (February 2025). Dedicated eastbound and westbound right-turn lanes are also recommended at this intersection to accommodate background traffic growth under the Year 2051 horizon.

Analysis Summary

Under 2051 future background conditions, the study area intersections are predicted to operate with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of the critical movements identified under the 2041 future background conditions.

Select movements are expected to queue beyond the proposed storage length similar to the critical movements identified under 2031 and 2041 future background conditions. At the intersection of Trafalgar Road and Derry Road, the 95th percentile queue for the northbound left-turn movement is projected to queue beyond the proposed storage but is expected to be contained within the effective taper length and cleared within a single signal cycle, which is deemed acceptable.

Without Trafalgar GO Scenario

For all future total conditions without the Trafalgar GO Station, the study area is expected to experience an increase in movements that are predicted to be over capacity at the external intersections. This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the future total traffic conditions without the operation of the future GO Station, forcing residents and visitors to be auto dependent. It is recommended that the intersections be monitored to determine if the forecasted volumes will be realized in the future, especially if the future GO Station is not operable by then.

Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the broader Regional and Town road networks, it is expected that existing traffic may relocate to alternative routes.

Future Total Traffic 2031 Conditions – Without GO

Intersection / Road Improvement

No intersection / road improvements are being recommended under this scenario.

Analysis Summary

Under 2031 future total conditions, all external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of select movements at the intersections of Trafalgar Road at Derry Road, Britannia Road, and Lower Base Line.

All the arterial-to-collector intersections operate well with overall reserve capacity and no individual movements over capacity. Although some movements experience LOS F, the v/c ratio is less than 1.0 during both peak hours, indicating reserve capacity remains.

Future Total Traffic 2041 Conditions – Without GO

Intersection / Road Improvement

A dedicated northbound right-turn lane is recommended at the intersection of Trafalgar Road and Collector D and dedicated eastbound right and westbound right-turn lanes are recommended at the intersection of Derry Road and Collector K.

The Main Street Extension from Fifth Line to Trafalgar Road has been included under the 2041 horizon year, as noted previously.

Analysis Summary

Under 2041 future total conditions, all external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road,

Britannia Road, and Lower Base Line.

All the arterial-to-collector intersections operate well with overall reserve capacity and no individual movements over capacity with the exception of select movements at the intersections of Derry Road at Collector K and Trafalgar Road at Collector D.

Future Total Traffic 2051 Conditions – Without GO

Analysis Summary

Under 2051 future total conditions, all external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road, Britannia Road, and Lower Base Line.

All the arterial-to-collector intersections operate well with overall reserve capacity and no individual movements over capacity with the exception of select movements at the intersections of Derry Road at Collector J/Z-15 Access, Trafalgar Road at Collector F, and Trafalgar Road at Collector D.

Future Total Traffic 2041 Conditions – With GO

Analysis Summary

Under 2041 future total conditions with the GO Station, all the external intersections are expected to operate with some reserve capacity and acceptable delays, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road, Britannia Road, and Lower Base Line that are expected to operate above theoretical capacity. Several intersections in the study area are expected to perform at a Level of Service (LOS) "E" or better, even with their maximum volume.

In comparison to the 2041 future total conditions without the GO Station, the difference in results illustrates the impact a GO Station would have on the surrounding road network and the need for a GO Station to support the future intensification within the Agerton area under 2041 conditions. It is recommended that the intersections be monitored through the Draft Plan Traffic Impact Studies to determine if the forecasted volumes will be realized in the future. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the network, existing traffic may relocate to alternative routes.

Highly relevant for the need and desire for intensification is that a high volume of 2041 background traffic on the regional roads is through-traffic. Desired intensification in this area should not be prevented by through-traffic on the regional roads which dominates the vehicle counts. Some priority in the modelling should be attributed to future local traffic, leaving the through traffic to either accept longer trip durations or choose a different route, mode or time of travel.

This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the 2041 and 2051 future total traffic conditions. It is recommended that the intersections

be monitored to determine if the forecasted volumes will be realized in the future.

Most of the arterial-to-collector intersections are expected to operate with reserve capacity, with most movements experiencing an LOS of 'E' or better under 2041 future total conditions. Some individual movements experience LOS 'F', however, these movements typically operate with reserve capacity. The higher delays (LOS 'E' and 'F') are due in part to relatively long cycle lengths of 140 seconds implemented along the Reginal corridors which inherently add delay to dedicated turning movements and vehicles on the minor approaches.

Future Total Traffic 2051 Conditions – With GO

Analysis Summary

Under 2051 future total conditions with the GO Station, all the external intersections are expected to operate with some reserve capacity and acceptable delays, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road, Britannia Road, and Lower Base Line that are expected to operate above theoretical capacity. Several intersections in the study area are expected to perform at a Level of Service (LOS) "E" or better, even with their maximum volume. While these intersections may operate beyond theoretical capacity during peak hours, this is a typical scenario at the crossroads of two major arterials. Importantly, the traffic flow at these intersections is anticipated to return to manageable levels outside of peak periods.

For the intersections that are predicted to experience over-capacity movements under 2051 future total conditions with the GO Station it is recommended that the intersections be monitored through the Draft Plan Traffic Impact Studies to determine if the forecasted volumes will be realized in the future. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the network, existing traffic may relocate to alternative routes.

Most of the arterial-to-collector intersections are expected to operate with reserve capacity, with most movements experiencing an LOS of 'E' or better under 2051 future total conditions. Some individual movements experience LOS 'F', however, these movements typically operate with reserve capacity. The higher delays (LOS 'E' and 'F') are due in part to relatively long cycle lengths of 140 seconds implemented along the Reginal corridors which inherently add delay to dedicated turning movements and vehicles on the minor approaches. Although select movements at the intersections of Trafalgar Road at Collector F and Trafalgar Road at Collector D are expected to operate beyond capacity.

A dedicated eastbound right-turn lane at the intersection of Trafalgar Road and Main Street was recommended based on capacity constraints.

MTSA Collector-to-Collector Intersections

All internal collector-to-collector intersections are expected to operate with ample capacity and minimal levels of delay, with no critical movements identified under future total (2031, 2041 and

2051) conditions with or without the Trafalgar GO Station.

Transportation Capacity Limit Assessment

TYLin evaluated the maximum population that can be supported prior to the commencement of Trafalgar GO Station operations, recognizing that development within the Agerton Secondary Plan Area will be guided by available transportation (including transit) capacity thresholds.

The 2041 intersection capacity analysis without GO Station scenario indicates that all study intersections are expected to operate near capacity (v/c ≈ 1.0). This reflects the threshold condition, encompassing 90% (12,690 people) of the projected MTSA population and 55% of projected employment within the Secondary Plan.

Estimated trips generated by the remaining 10% of population growth and 55% of employment were compared. The comparison indicates a difference of 2,088 trips in the a.m. peak and 1,543 trips in the p.m. peak. Considering that 55% employment represents a substantially higher estimated trip volume than the remaining 10% population growth, the difference is estimated to account for 10 years of additional growth. This approach is therefore considered conservative in assessing the network's capacity prior to the implementation of the GO Station. The results suggest that the proposed traffic network in 2051 could accommodate full residential build-out (100% population) in the absence of employment development.

Notwithstanding the above comparison estimates, development in the MTSA will be guided by transportation (including transit) and capacity thresholds. Understanding the MTSA is planned to accommodate a population of 14,100 people and considering the phased approach of population and employment growth between 2031 and 2051, it is TYLin's opinion that a maximum of 12,690 people (90% of the Secondary Plan target) can be accommodated before the Milton Trafalgar GO Station is in operation. This limit may be raised without an amendment to this Secondary Plan if a transportation study is conducted that supports additional population to the satisfaction of Halton Region and the Town of Milton.

This Addendum represents a planning-level transportation assessment prepared to evaluate network performance at interim stages up to conceptual full build-out conditions (2051 horizon) for the Agerton Secondary Plan Area. As individual development applications advance, site-specific Transportation Impact Studies (TIS) will be required in accordance with Halton Region and Town of Milton guidelines. These future studies will incorporate updated traffic data, refined land use statistics, finalized roadway designs, and any changes to surrounding network conditions. Accordingly, specific mitigation measures and intersection configurations identified herein may be refined through subsequent detailed review and agency coordination. A summary of anticipated geometric improvements and associated design horizons is included in the following table.

Arterial Geometric Improvements Summary

Int.	Improvement	Planned/Recommended	Scenario
Trafalgar Road & Hwy 401 WB Ramps	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
Trafalgar Road & Hwy 401 EB Ramps	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
Trafalgar Road & (Future) Main Street	Main Street extension (2 lanes/direction)	Planned	2041 FB
	Add EBL/WBL/NBL/SBL Turn Lanes	Recommended	2041 FB
	Add EBR Turn Lane	Recommended	2051 FT
Trafalgar Road & Derry Road	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
	Add EBT/WBT Lanes (HOV)	Planned	2031 FB
	Add NBR/WBR Turn Lanes	Planned	2031 FB
	Add EBL/NBL/SBL Dual Turn Lanes	Recommended	2031 FB
	Add WBL Dual Turn Lane	Recommended	2041 FB
Trafalgar Road & Britannia Road	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
	Modify EBT/WBT Lanes to HOV	Planned	2031 FB
	Add NBR/SBR Lanes	Planned	2031 FB
	Add NBL/SBL Dual Turn Lanes	Recommended	2041 FB
Trafalgar Road & Lower Base Line	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
	Add NBR/SBR Lanes	Planned	2031 FB
	Add Dual SBL Turn Lane	Recommended	2041 FB
	Add EBT/WBT Lanes	Planned	2051 FB
	Add EBR/WBR Turn Lanes	Recommended	2051 FB
Eighth Line & Derry Road	Add EBT/WBT Lanes (HOV)	Planned	2031 FB
	Add EBR/WBR Turn Lanes	Planned	2031 FB
Eighth Line & Britannia Road	Modify EBT/WBT Lanes to HOV	Planned	2031 FB
	Add WBR Turn Lane	Planned	2031 FB

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1 INTRODUCTION

TYLin International Canada Inc. (TYLin) was retained by Agerton New Urban Ltd. Landowners Group (MP4 Agerton) to provide advisory transportation planning and engineering services in support of the development of the Agerton lands within the broader Milton Phase 4 (MP4) area.

The Town of Milton commenced planning for the neighbouring Trafalgar and Agerton Secondary Plans within the MP4 area simultaneously, to plan the two Secondary Plan (SP) areas concurrently. Accordingly, the transportation report prepared for the Trafalgar and Agerton Secondary Plan Areas (TSPA or ASPA) analyzed the future traffic generated by both areas together (i.e. impacts specific to Trafalgar and Agerton traffic were not separated). The latest Addendum to the "Transportation Master Plan for the Trafalgar and Agerton Secondary Plan Areas" (TMP) was prepared by WSP in March 2022.

The purpose of this TMP Update is to update the previous 2022 TMP Addendum report completed by WSP, accounting for proposed land use density and road network modifications put forth by MP4 Agerton. The update will provide analysis for the 2031, 2041, and 2051 planning horizons, and the assessment of an ultimate 2051 horizon will align with the Region's Joint Best Practice Estimates (JBPE) and activity-based model. Intersection improvements will be recommended, as required, based on traffic analysis results for each horizon year and scenario. The subsequent section identifies the principles and key methodologies guiding TYLin's work for the TMP Update.

1.1 Guiding Principles

To ensure appropriate delivery of the Update to the ASPA Transportation Master Plan (TMP), it is critical to reiterate key principles guiding TYLin's work. These principles were identified in the March 2022 TMP and reinforce the broader goals outlined within the ASPA. In addition to identifying principles in this section of the Update, subsequent portions of the report will clarify the methodology applied for analysis, in addition to any assumptions underscoring TYLin's work.

Consider the following summary of the transportation-related principles informing the work within the Update:

- Ensure the community is characterized by higher-order transit service, appropriate infrastructure, and multi-modal connections.
- Provide for a seamless and well-functioning active transportation and goods movement network that is accessible for all.
- Encourage a logical road network which maintains connectivity to other parts of Milton, Halton Region and surrounding municipalities, that is underscored by sufficient levels of service and performance.

- Make use of regional zones, population, employment and residential unit forecasts alongside landowner development densities to prepare 2031, 2041, and 2051 study horizon trip generation results.

1.2 Study Methodology

The TMP Update has been prepared in accordance with the Halton Region's Transportation Impact Study Guidelines (2015). TYLin submitted a Terms of Reference (TOR) specifying the approach for the TMP Update to all relevant agencies, including Halton Region and Town staff. Following the incorporation of comments and feedback, the summary below outlines the approach pursued in this report:

- ***Section 1.3 – Study Area:*** Provide an adequate description of the project study area and development proposal. Describe changes to land use density and road network modifications.
- ***Section 2 – Existing Conditions:*** Review relevant background documents and applicable policies to complete a comprehensive description of multi-modal networks, transit infrastructure and other network elements.
- ***Section 2.5 – Existing Traffic Data:*** Identify base-year traffic conditions which will be used to project volumes to the 2031, 2041, and 2051 study horizons. New turning-movement-count collection was undertaken in May, 2025. Weekday a.m. and p.m. peak hours were analyzed. The new TMC data helps account for road improvements in the study area along Britannia Road, alongside changes to commuting patterns resulting from COVID-19.
- ***Section 3 – Future Background Conditions:*** TYLin was provided annual growth rates for each segment of Region and Town roads within the study area for each horizon year. The Base Line growth rates were modified based on EMME modeling that removed Agerton-based traffic from the background growth calculations. Trafalgar Secondary Plan traffic was not able to be removed from the background growth rate, however, Trafalgar site traffic extracted from TYLin's November 2025 Trafalgar Road Network Assessment (RNA) was added to select intersections and movements that did not already have background growth rates applied.
- ***Sections 2.5, 3 and 5 – Traffic Analysis Related Work:*** Intersection capacity and queuing analyses were undertaken using Synchro version 12.0, with results generated using the Highway Capacity Manual 2000 (HCM 2000) methodology, therefore adhering to the Region's TIS Guidelines. The Study Area intersections were analyzed under existing, future background (without the proposed Agerton Corridor development) and future total (with Agerton Corridor development) conditions for the weekday a.m. and p.m. peak hours. Planned and recommended infrastructure and signal timing improvements were noted

under future scenarios as required, with considerations also based on timing of regional and municipal infrastructure improvement planning.

- ***Section 4.6 – Trip Generation:*** For all trip generation estimates, site-related traffic was calculated using rates within the Institute of Transportation Engineers (ITE) Trip Generation Manual (12th Edition). All trip generation and mode split assumptions are clearly documented.

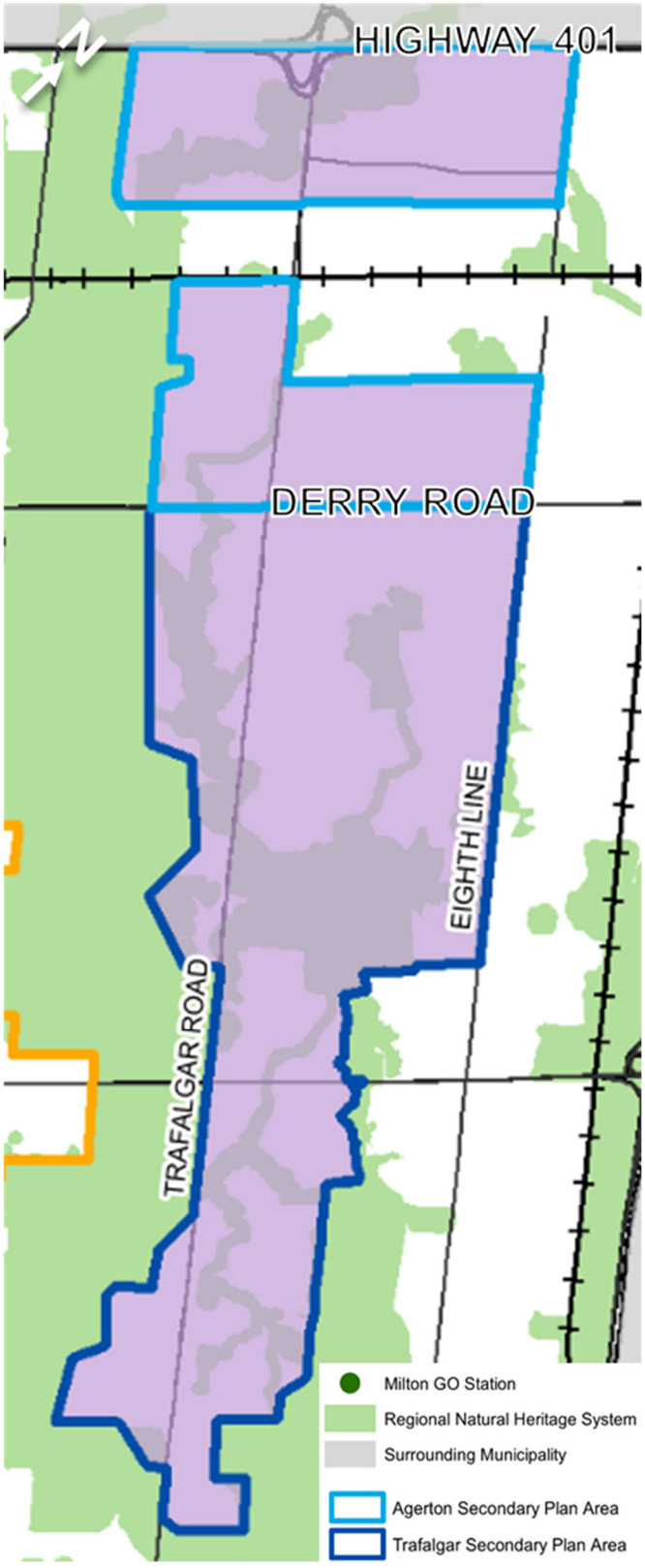
1.3 Study Area

The Agerton Secondary Plan Area (ASPA) is adjacent to the eastern limit of the Town of Milton. North of the study area, as per **Figure 1-1**, is Highway 401. The eastern boundary of the ASPA area runs along the Eighth Line, and the Sixth Line is adjacent to the western boundary. Trafalgar Road traverses north-south through the ASPA area, and the southern boundary runs along Derry Road.

The ASPA features the following intersections:

- Trafalgar Road & Highway 401 Westbound On- and Off-Ramp (Existing, Signalized)
- Trafalgar Road & Highway 401 Eastbound Off-Ramp (Existing, Signalized)
- Trafalgar Road & Derry Road (Existing, Signalized)
- Trafalgar Road & Britannia Road (Existing, Signalized)
- Trafalgar Road & Lower Base Line (Existing, Signalized)
- Eighth Line & Britannia Road (Existing, Signalized)
- Eighth Line & Derry Road (Existing, Unsignalized)
- Trafalgar Road & Main Street (Future, Signalized)

Figure 1-1 Study Area Context and SPA Boundaries



2 EXISTING CONDITIONS

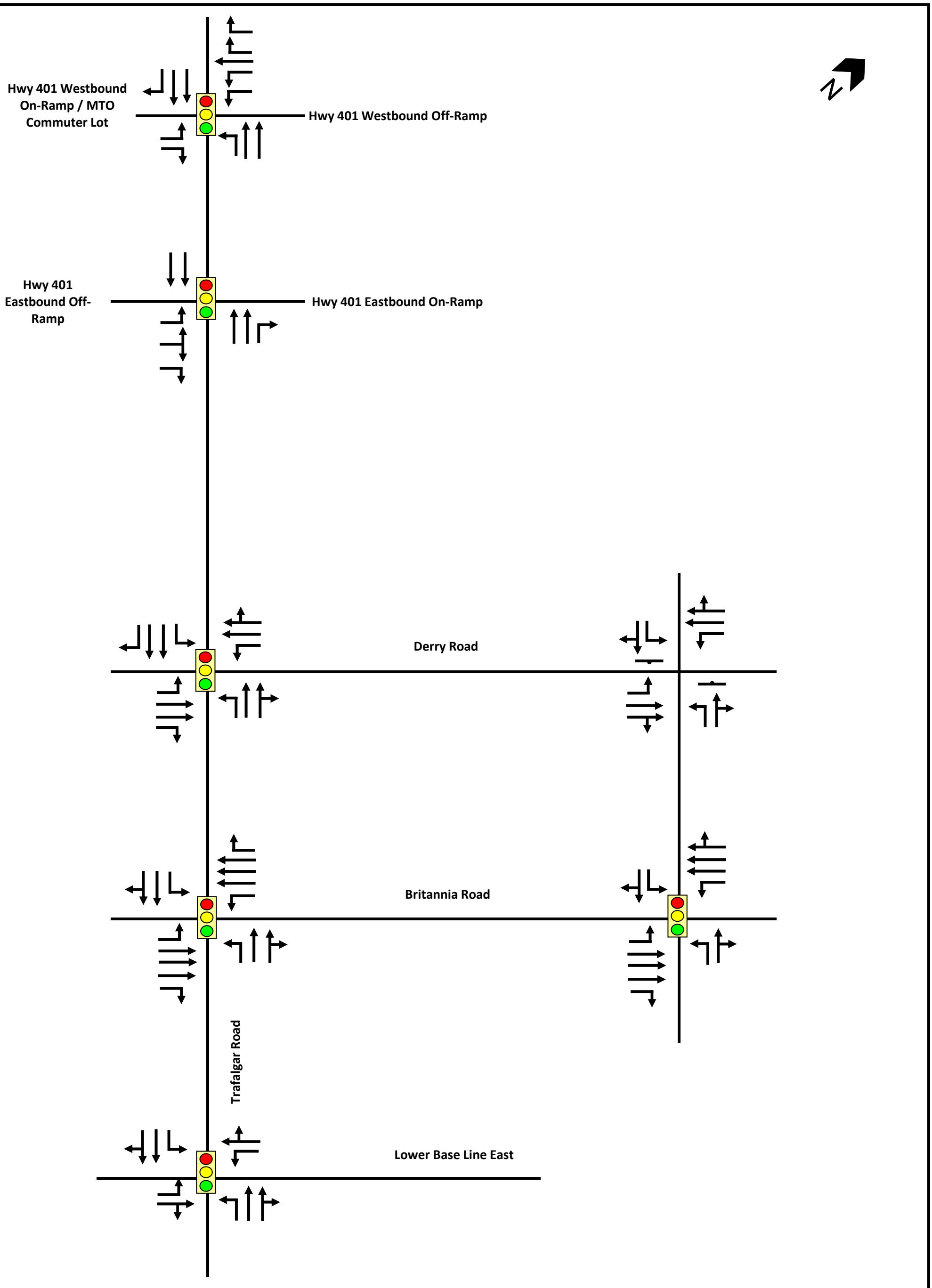
2.1 Road Network

The Study Area Road network includes Regional and Town roads that provide connections to Provincial Highways 401 and 407, as well as the neighbouring municipalities of Halton Hills, Mississauga, and Oakville.

The existing road network includes the following roads:

- **Highway 401** is an east-west provincial highway featuring a six-lane cross-section, with a posted speed limit of 100 km/h within the Study Area. The interchange on Trafalgar Road is located in the ASPA.
- **Trafalgar Road** is a north-south major arterial roadway under the jurisdiction of the Region of Halton, as per the Local Plan. Currently, the roadway has a five-lane rural cross-section consisting of two lanes in each direction and a centre median. It should be noted that north of Derry Road, there is no existing centre unused lane nor two-way-left-turn lane along Trafalgar Road. Trafalgar Road has a posted speed limit of 60 km/h in the vicinity of Derry Road, with paved shoulders and no sidewalks.
- **Derry Road** is an east-west major arterial roadway under the jurisdiction of the Region of Halton, as per the Local Plan. Currently, the roadway has a four-lane rural cross-section consisting of two lanes in each direction. Derry Road has a posted speed limit of 80 km/h within the study area, with paved shoulders and no sidewalks.
- **Britannia Road** is an existing east-west major arterial roadway under the jurisdiction of Halton Region. At the time of this report, the construction of Britannia Road has been completed and has been widened to a 6-lane cross-section with an urban cross-section with active transportation facilities and a posted speed limit of 60 km/h.
- **Eighth Line** is a north-south collector road under the jurisdiction of the Town of Milton. Currently, the roadway has a two-lane rural cross-section consisting of one lane in each direction. Eighth Line has a posted speed limit of 70 km/h in the vicinity of Derry Road, with no sidewalks and discontinuous gravel shoulders.
- **E Lower Base Line (Lower Base Line)** is an existing east-west collector roadway under the jurisdiction of the Town of Milton. Currently, this road has a rural two-lane cross-section and has a posted speed limit of 60 km/h within the vicinity of the subject site.

A lane configuration diagram of the study area road network is provided in **Figure 2-1.**



TYLin

Legend

Signalized Intersection

Unsignalized Intersection

Existing Lane

Figure 2-1

Existing Lane Configuration

2.2 Agerton Roadway Element Review

2.2.1 Roadway Functional Classification

Per the Town of Milton's TMP Update (2025), roadway classification in the Town of Milton is based on Canada-wide and Region Right-of-Way (ROW) practices. **Figure 2-2** presents Milton's existing roadway functional classification of roadway types as per the Town's 2024 Engineering and Parks Standard Manual.

Figure 2-2 Existing Functional Classification Table

Table 21. Existing Functional Classification and ROW

Category	ROW (m)	Standard Drawing Number	Parking Allowed
Laneway	11	01-11.01	Not Allowed
Local	20	01-20.01, 01-20.02, 01-20.03	1 Side
Minor Collector	24	01-24.01	1 Side
Major Collector	26	01-26.01	Site Specific
Arterial	30	01-30.01	Not Allowed
Arterial with Median	35	01-35.02	Not Allowed
Industrial Arterial	35	01-35.01	Not Allowed

Figure 2-3 illustrates the proposed changes for future roadways as recommended in the Town of Milton's TMP Update (2025). The recommended functional classification and ROW provided below was considered for all new roadways within the Agerton SPA and MTSA.

Figure 2-3 Proposed Functional Classification Table

Table 22. Recommended Functional Classification and ROW

Category	ROW (m)*	Parking Allowed
Minor Local	16	1 Side
Major Local	18	1 Side
Minor Collector	22	1 Side
Major Collector	26	1 Side
Arterial without Median	35	Not Allowed
Arterial with Median	35	Not Allowed
Category	**ROW (m)***	**Parking Allowed**
Arterial without Median	35	Not Allowed
Arterial with Median	35	Not Allowed

* Alternate right of way widths may be considered through specific development plans, if supported by the context of the plan and by plan-specific traffic and transportation studies, to the satisfaction of the Town. In addition, individual Municipal Class Environmental Assessments for transportation projects may result in a recommended right of way width that differs from those identified above.

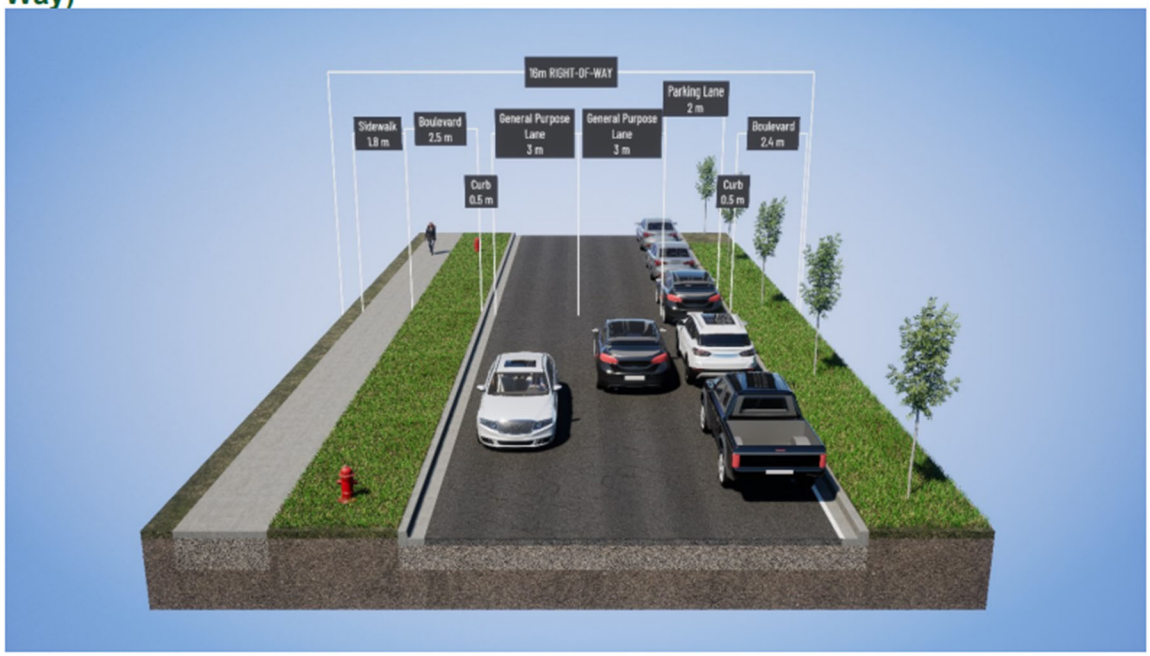
Each roadway type fulfills a specific purpose. The Town TMP Update (2025) states that roads are to be classified based on their function. A general characterization of these functional categories entails the following:

- **Local:** Primarily providing access to properties and connecting to higher-order roads. Lowest volumes across categories. Consists of one or two lanes.
- **Collector:** Providing both property access and traffic movement. Higher volume than local roads. Consists of one or two lanes. Consists of one or two lanes.
- **Minor Arterial:** Traffic movement is a primary consideration, with some property access. Higher volumes than collector roads, but less than a major arterial. Consists of two or four lanes.
- **Major Arterial:** Traffic movement is the primary function. Higher volumes than a minor arterial, but less than an expressway. Consists of two or four lanes.
- **Regional Arterial:** Traffic movement is the primary function that serves longer distance and inter-regional travel across municipal boundaries. Higher volumes than a municipal arterial road, but less than an expressway. Consists of up to six lanes.

Standard cross-sections identified for each of these categories are shown in **Figure 2-4** through **Figure 2-8** below.

Figure 2-4 Minor Local Cross-Section - Milton TMP Update

Figure 52. Recommended Minor Local Road Typical Cross-Section (16m Right-of-Way)



Source: Created by WSP on Beyond Typicals

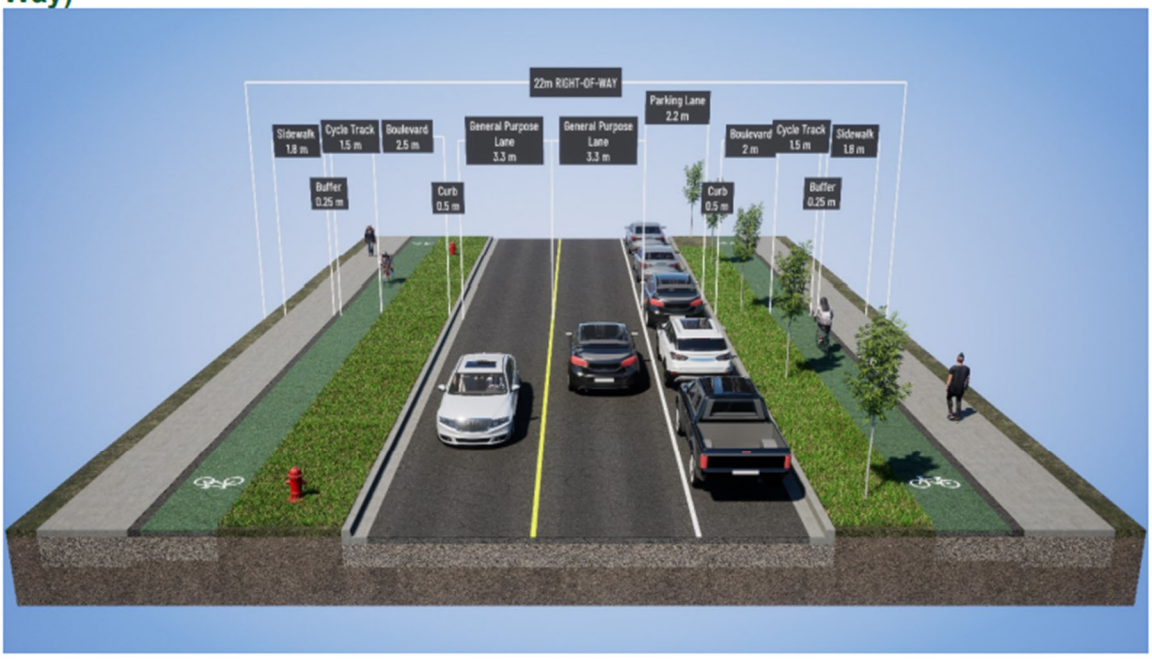
Figure 2-5 Major Local Cross-Section - Milton TMP Update

Figure 53. Recommended Major Local Typical Cross-Section (18m Right-of-Way)

Source: Created by WSP on Beyond Typicals

Figure 2-6 Minor Collector Cross-Section - Milton TMP Update

Figure 54. Recommended Minor Collector Typical Cross-Section (22m Right-of-Way)



Source: Created by WSP on Beyond Typicals

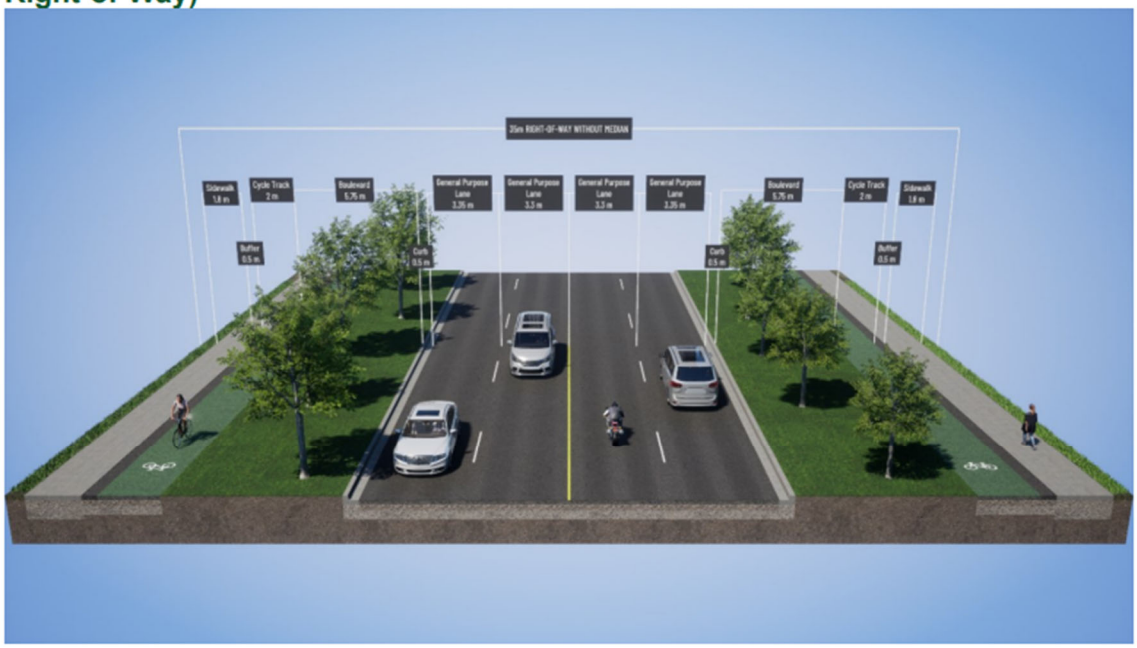
Figure 2-7 Major Collector Cross-Section - Milton TMP Update

Figure 55. Recommended Major Collector Typical Cross-Section (26m Right-of-Way)

Source: Created by WSP on Beyond Typicals

Figure 2-8 Arterial (No Median) Cross-Section - Milton TMP Update

Figure 56. Recommended Arterial Without Median Typical Cross-Section (35m Right-of-Way)



Source: Created by WSP on Beyond Typicals

2.2.2 Right-of-Way Component Review

In keeping with Halton Region's Transportation Master Plan (TMP) and the Integrated Master Plan (IMP), the ultimate ROW for the arterial roads within the study area, including Trafalgar Road, Britannia Road, and Derry Road, has been established as 47 metres, accommodating a six-lane cross-section with provisions for active transportation and transit-supportive infrastructure. **Figure 2-9** illustrates the 2051 Preliminary Road Network Strategy.

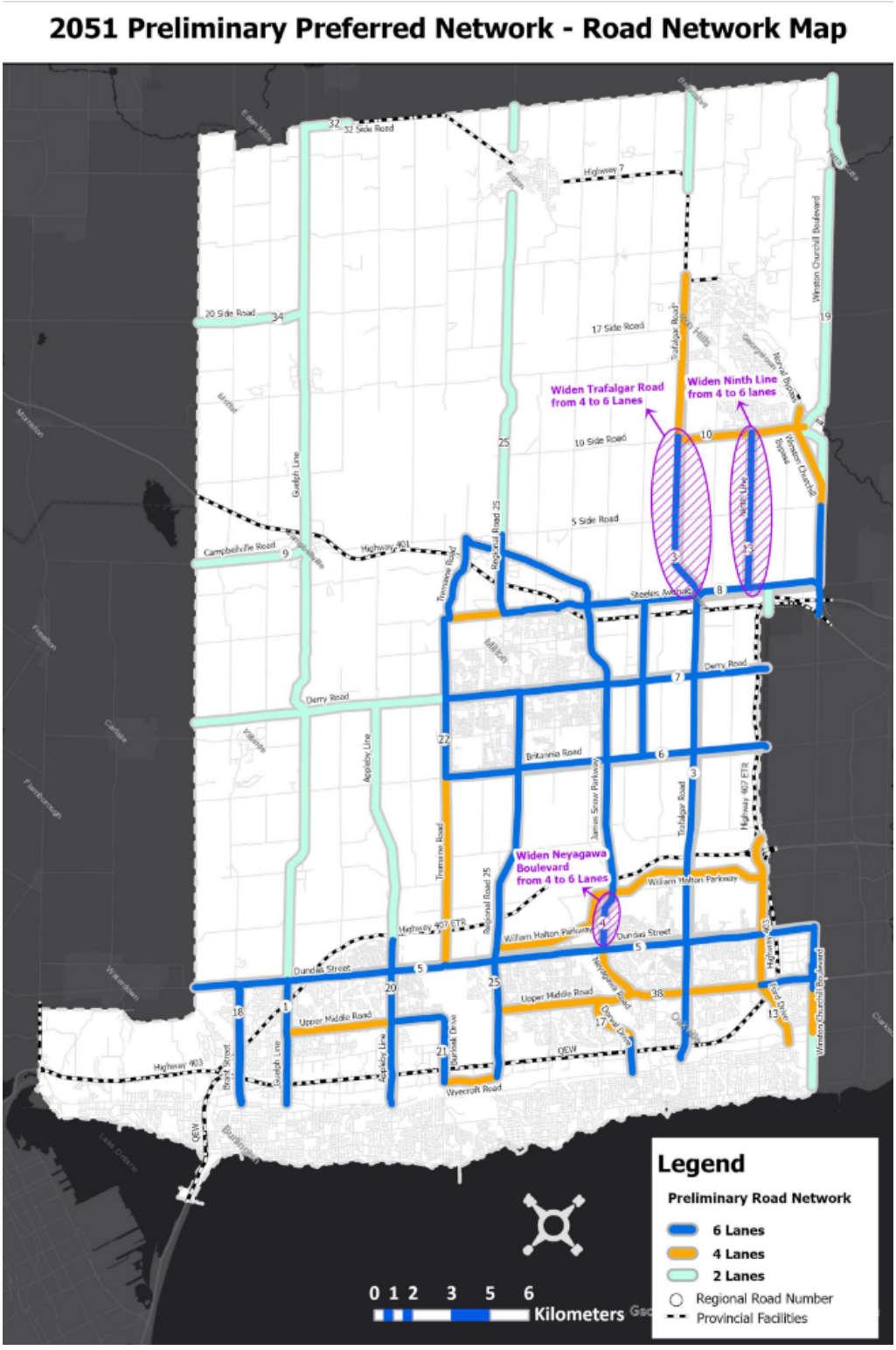
A table from the 2025 TMP Update is provided outlining the minimum width for cross-section elements, as shown in **Figure 2-10**.

Within the Secondary Plan area, collector roads are proposed with a 22-metre ROW, providing two travel lanes, on-street parking, cycle track and sidewalk on both sides of the road.

To maximize walkability within the MTSA, major local roads are proposed with an 18-metre ROW, providing two travel lanes, on-street parking, and sidewalks on both sides of the road.

At intersections where collector roads connect to a Regional road, the design assumes one dedicated left-turn lane and shared through/right-turn lane as a preliminary assumption. Recommendations will be made as to the modification of intersection configurations within the Agerton SPA, based on the analysis completed as part of the Update.

Figure 2-9 Region's 2051 Preliminary Road Network Strategy



Source: Halton Region's Intergrated Master Plan

Figure 2-10 Minimum Width for Cross-Section Elements - 2025 TMP Update

Table 23. Minimum Widths for Cross Section Elements

Element	Minimum Width (m)
Setback	0.3
Sidewalk	1.8
Boulevard (with Canada Post mail box stations)	2.5
Boulevard (no Canada Post mail box stations)	2.0
Cycle track	1.5
Buffer between cycle track and sidewalk	0.25
Curb and gutter	0.5
General purpose lane (no transit operating in lane)	3.0
General purpose lane (with transit operating in lane)	3.3
On-street parking	2.0

2.2.3 Road Safety Criteria Review

Demonstrating the fulsome nature of TYLin's work completed for the Update, it is helpful to contextualize potential road safety concerns and accompanying criteria. This will assist in determining the appropriateness of integrating certain ROW elements (I.E., bike lanes) along roads in the Agerton SPA. Using resources available from the Town, Milton identifies safety guidelines for five categories. This includes pedestrians, cyclists, driving and traffic, neighbourhood, and school safety. Relevant categories to identify potential risks and criteria for purposes of the Update are active modes (pedestrian and cyclist) and automobile users.

2.2.3.1 Active Transportation and User Risks and Criteria

Potential conflicts for active users include collisions with vehicular traffic in addition to other active users. Without the presence of dedicated or clear active transportation facilities in the ROW, the risk of these conflicts is heightened. The implementation of roundabouts and pedestrian crossovers helps create a safer environment for pedestrians in Milton. For the Agerton SPA, where analysis of the Update demonstrates volumes, roadway performance or other factors pose a risk to the safety of active users, recommendations to mitigate conflicts will be put forth. Other strategies for creating a safer Active Transportation (AT) environment are highlighted in the cross-sections prepared for the 2025 TMP Update, which have been included in this Update. For instance, given the predominant presence of collector roads, cross-sections like **Figure 2-6** and **Figure 2-7** which feature separated, off-grade bike lanes and sidewalks, should be the standard pursued in the Agerton SPA. In addition, for local roadways, the provision of one-sided street parking as per **Figure 2-4** and **Figure 2-5**, can serve as a traffic calming measure and should also be pursued where permitted in the Agerton SPA.

Any physical infrastructure will be paired with appropriate pavement markings, signing and other

roadway elements per the requirements of the Ministry of Transportation (MTO). Specific recommendations as to the type of markings and signs are to be completed at a detailed design phase. Other features, such as stipulating roadway or curb dimensions, are also subject to further assessment during a later project phase.

2.2.3.2 Vehicles and Traffic Risks and Criteria

A foremost risk for vehicular traffic is the potential for road collisions. Milton currently has a Traffic Calming Policy which outlines tools, strategies and initiatives for managing traffic in residential areas. Milton's approach is largely premised on engineering, education and enforcement. The first category of engineering is most relevant to the work prepared for this Update.

Physical measures, including the type of traffic control used at a given intersection, are critical to the Update. Where analysis demonstrates levels of service that are not acceptable based on Halton Region TIS guidelines, network adjustments will be made. For example, an improvement might entail the integration of a signal at a previously unsignalized intersection.

Advising on the integration of physical infrastructure, such as speed cushions, bumps, and accompanying signage, is to be completed at a detailed design phase. Any future work related to these elements would be subject to municipal approvals and processing, with the need for adherence to MTO requirements.

2.2.4 Emerging Transportation Technologies and Market Conditions Review

A review of technologies identified in the 2025 TMP reveals the proposed integration of Transit Priority measures in the Town of Milton. In addition to this example, other emerging transportation technologies include micromobility devices and the growing adoption of electric vehicles (EVs) and the presence of automated vehicles (AVs).

2.2.4.1 Transit Priority Measures

The 2025 TMP Update identifies transit priority measures as the "use of technology and/or road widening to enhance transit travel times, boost reliability and increase bus speeds compared to private vehicles" (WSP, 2025). The benefits of implementing transit priority measures include those in **Figure 2-11**, which has been derived from the 2025 TMP Update. Examples of options available for achieving transit priority are highlighted in **Figure 2-12**.

In the context of the work completed for the Update, the results of analysis may illustrate the need for measures which improve transit service. Given the location of the proposed GO Station is situated within the Agerton SPA, transit priority is critical. In the subsequent section of the Update, which reviews the existing multi-modal network, a hypothetical transit servicing plan will be provided.

Figure 2-11 Transit Priority Benefits - 2025 TMP Update

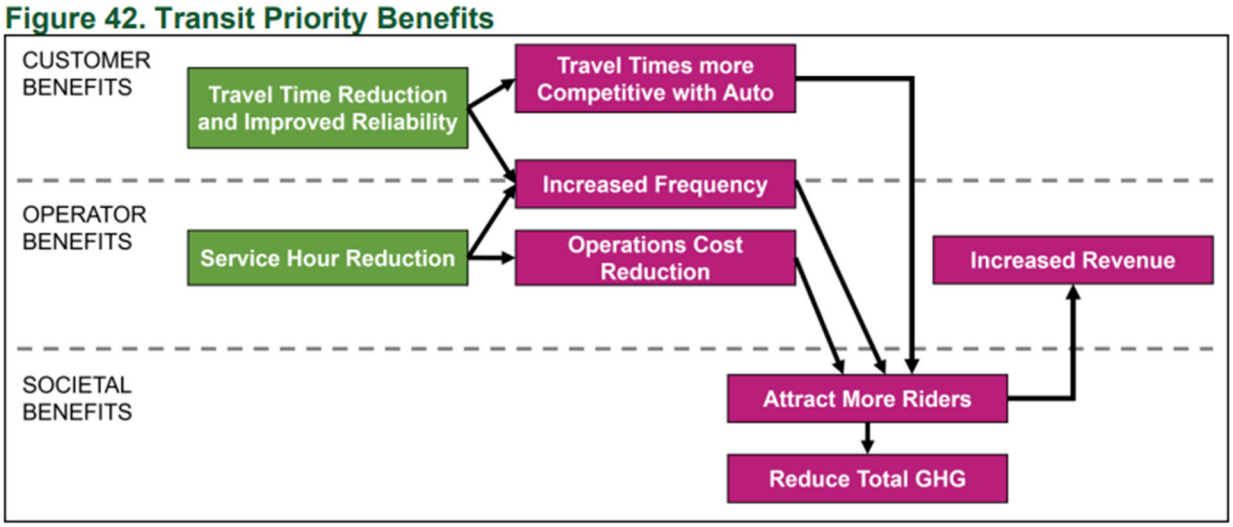
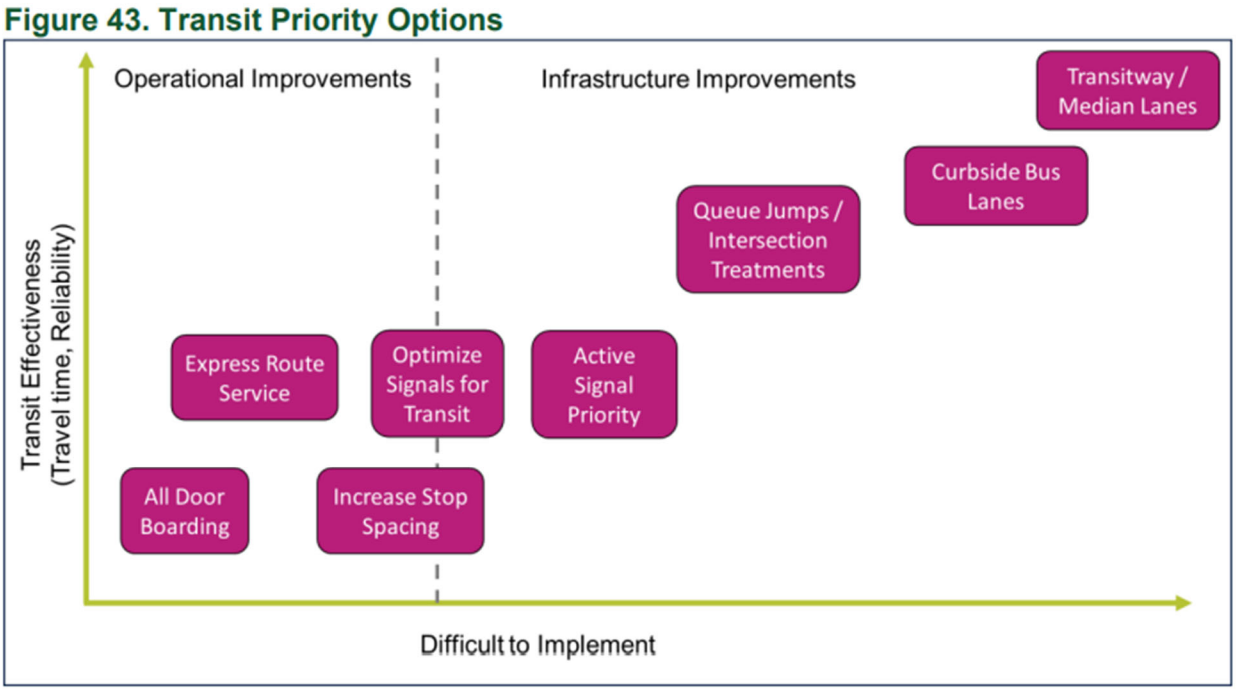


Figure 2-12 Transit Priority Options - 2025 TMP Update



2.2.4.2 Adoption of Micromobility

Across municipalities in Ontario, the use of e-scooters, e-bikes, and similar devices has become more prevalent. Providers like Neuron currently operate in a total of seven cities in Ontario and a plethora of other communities across Canada. One of the key considerations with this technology is the ability for individuals to travel at faster speeds compared to conventional, non-motorized micromobility devices. In turn, this reiterates the need to prioritize safety and, as per the risk criteria identification

in **Section 2.2.3.2**, emphasizes the need for separated pedestrian and cyclist or micromobility infrastructure along roads within the Agerton SPA where possible.

2.2.4.3 Adoption of Electric Vehicle and Autonomous Vehicle Technology

The implications of broader adoption of electric vehicle (EV) and autonomous vehicle (AV) technology for this Update and the Agerton SPA primarily relate to the presence of supportive infrastructure. At a high level, during future design phases, it may be advisable to integrate EV charging stations throughout the Agerton SPA, however, this will likely be achieved through individual actions on behalf of EV vehicle owners or will be supported at the proposed GO Station through parking lot design.

In the case of AV technology, the Province of Ontario (as of August 2025) has supported an ongoing AV Pilot Program, which is operating in various communities, including Milton. Like EV technology, the repercussions and means for supporting this emerging technology are largely the responsibility of owners or individuals. Over time, as the use of AVs becomes more prevalent, it is expected that the Province of Ontario will continue working with municipalities to define roadway design, signing and pavement marking guidelines to safely and effectively accommodate AV technology.

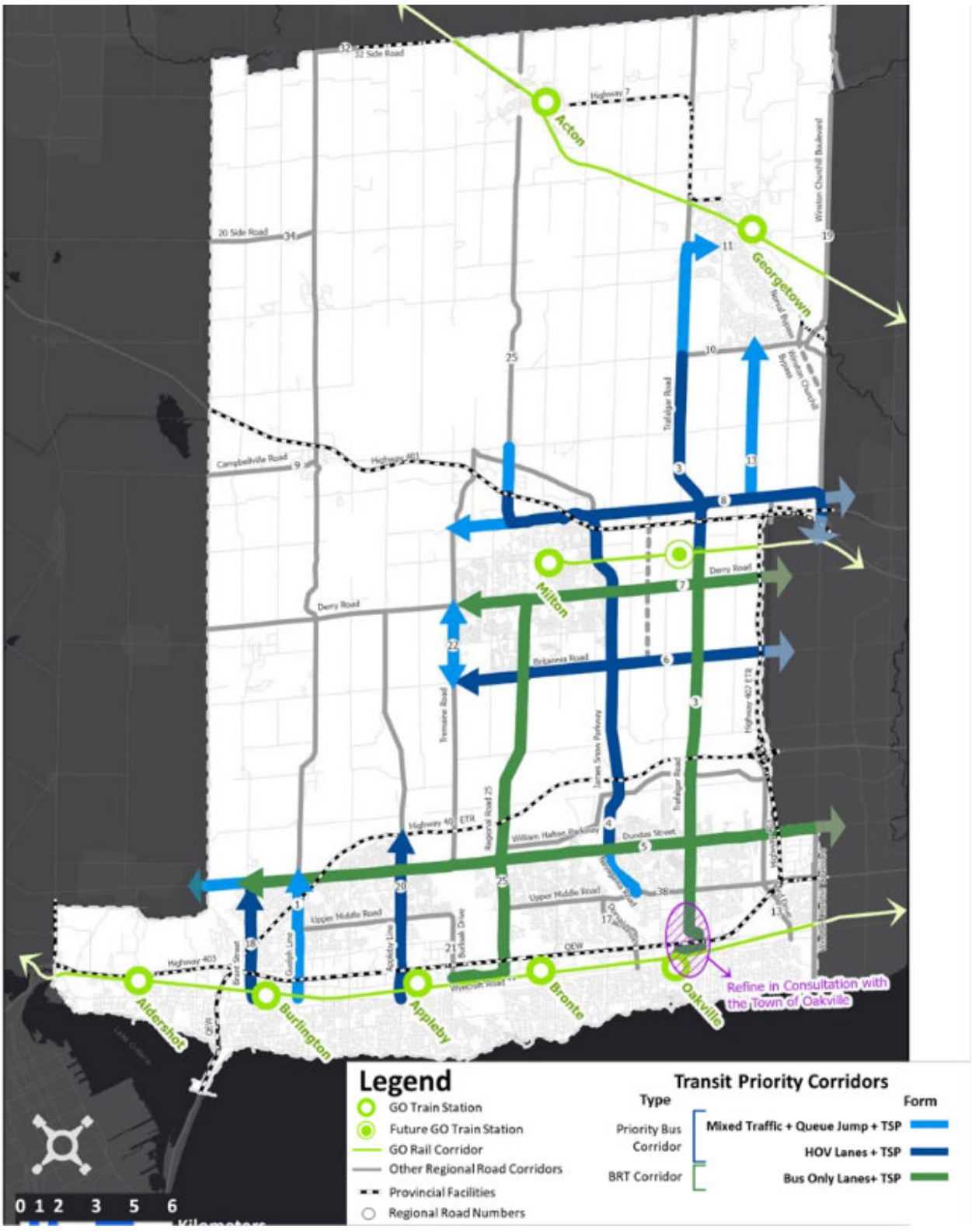
2.2.5 Review of Multi-Modal Network and Facility Types

Proposed facilities for active transportation users, including cyclists and pedestrians can be reviewed, alongside transit service planned for the Agerton SPA. The Trafalgar RNA completed by TYLin is used as a reference for discussing the multi-modal network and facility types.

2.2.5.1 Future Transit Corridors

Consistent with the Region's IMP, Trafalgar Road and Derry Road are identified as future Bus Rapid Transit (BRT) corridors, while Britannia Road is planned to include High-Occupancy Vehicle (HOV) lanes to support inter-regional transit connectivity and enhance network capacity. **Figure 2-13** illustrates the transit priority corridor network recommended in IMP in 2051.

Figure 2-13 IMP's Transit Priority Corridor Network in 2051



Source: Halton Region's Integrated Master Plan

Milton's 2019 – 2023 Transit Services Review & Master Plan Update (2019) noted that planned future developments and transit stations in the Town of Milton will benefit from inter-regional transit. The Town proposed several long-term, fixed-route alignments to better connect future and existing residents to Oakville and Mississauga via inter-regional transit by providing 30-minute headways all day. Captured within the Agerton SPA, the proposed transit route is detailed below and illustrated in **Figure 2-14**.

- **Oakville GO to Georgetown GO** would be a GO Transit proposed route providing north-south service from Georgetown GO Station to Oakville GO Station.

2.2.5.2 Proposed Local Transit Framework – Trafalgar RNA Review

The Trafalgar RNA completed by TYLin proposed multiple new transit routes to address population growth occurring outside the Town's urbanized areas. Three routes originally planned for the Trafalgar Tertiary Plan, as described below, have been carried forward in this report. Additionally, an alternative route is proposed to ensure adequate service of employment lands in the ASPA. In keeping with the RNA, these routes provide two-way, all-day service. These routes have been designed to facilitate convenient and accessible transit service between the ASPA and other major nodes within the Town of Milton and surrounding areas.

The proposed transit network for the development is illustrated in **Figure 2-14.** The proposed local transit routes were determined based on the proposed collector road network, the future land uses within the ASPA, and the walking distance to a transit stop.

Figure 2-14 Proposed Transit Routes for ASPA and Trafalgar Routing

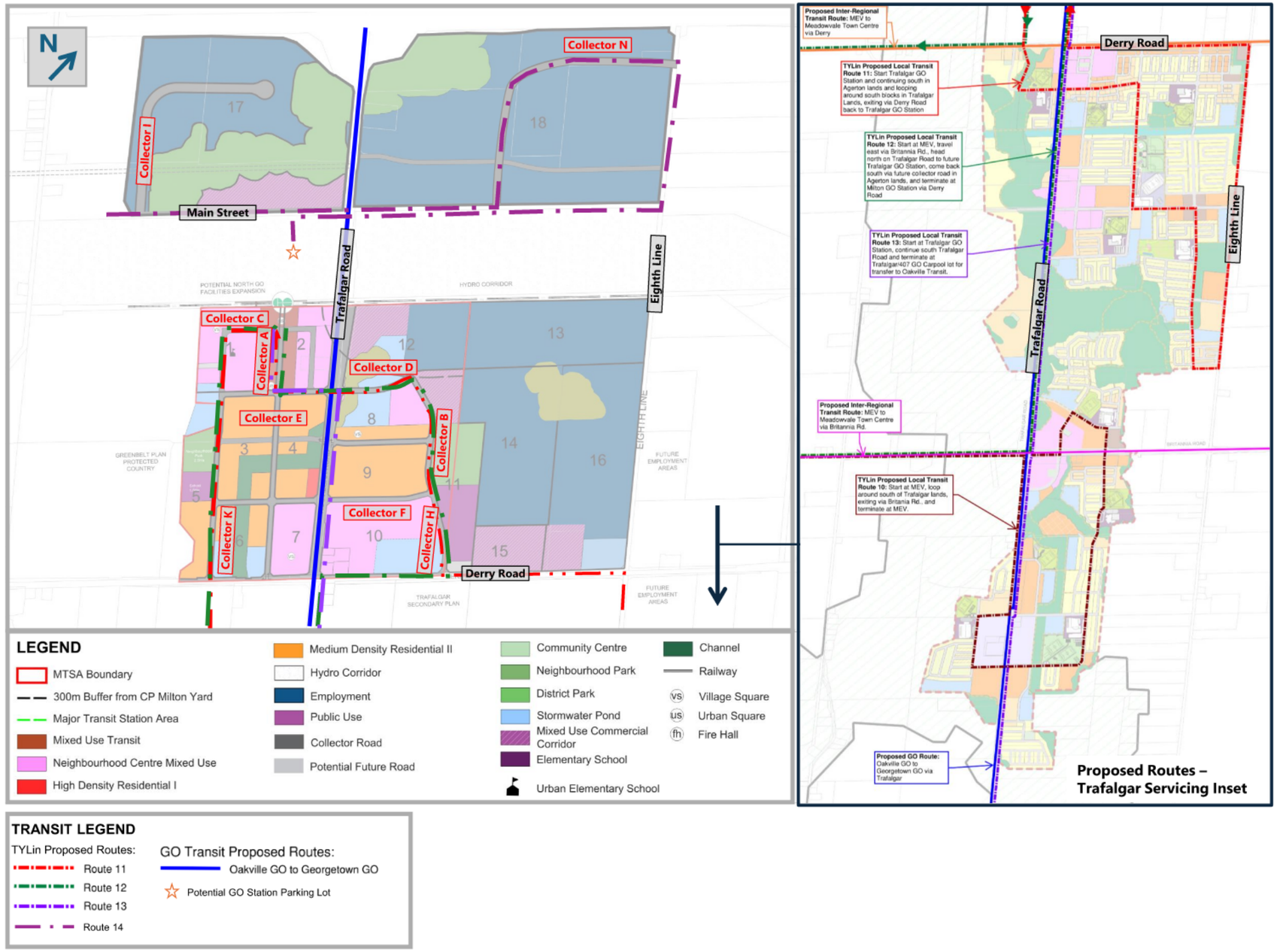
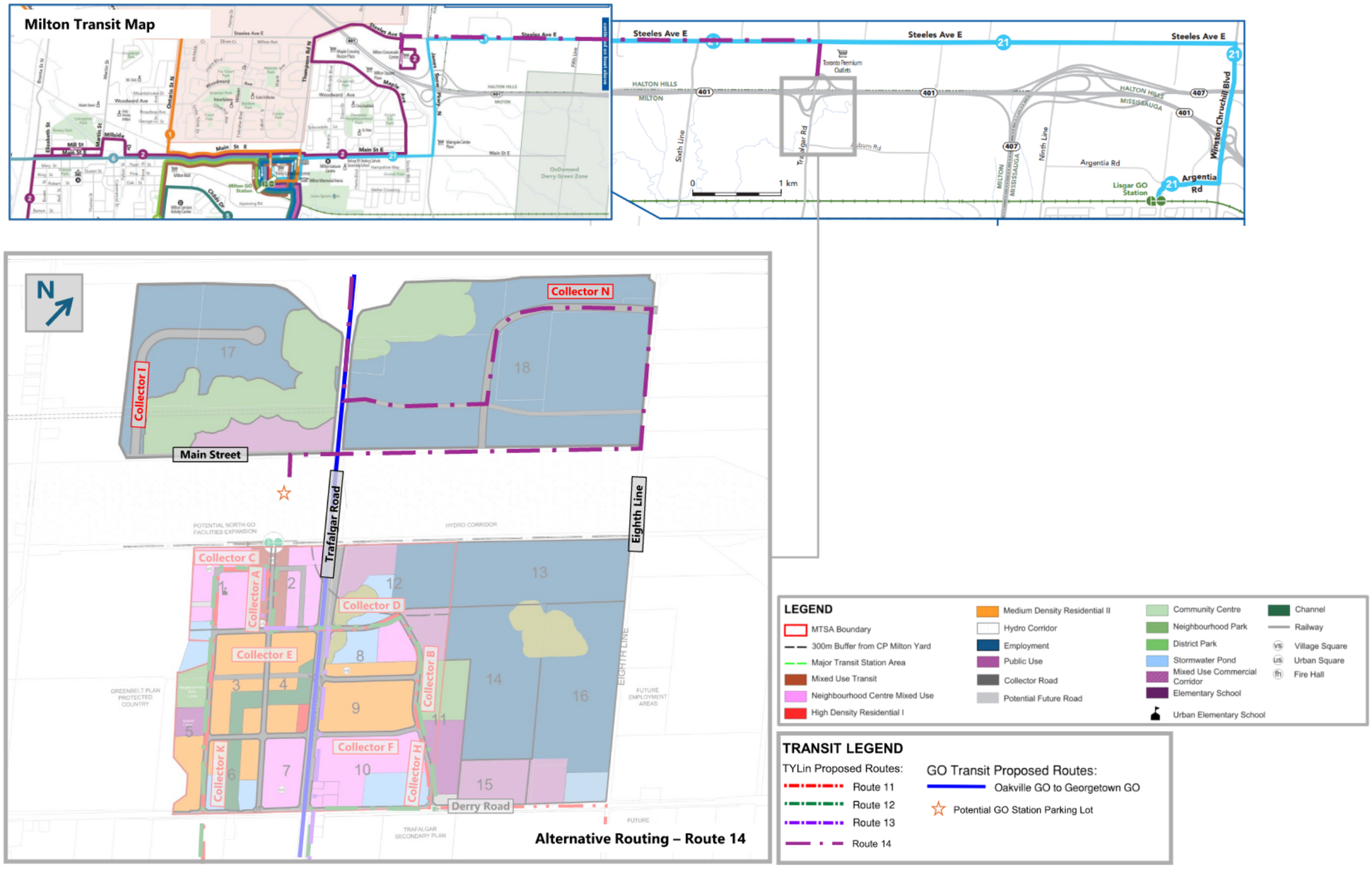


Figure 2-15 Alternative Routing for Route 14



According to Milton's 2019 – 2023 Transit Services Review & Master Plan Update, the Town assumed a 500m walking distance to an existing transit stop when analyzing the coverage of existing transit routes. It should be noted that the standard walking distance to a transit stop is 400m according to the Canadian Urban Transit Association (CUTA), but 500m was applied in Milton to account for the Town's access issues. For consistency, the 500m walking distance that was implemented in Milton's Master Plan Update was adopted in the Trafalgar RNA transit plan to assess the coverage of the proposed transit routes.

Figure 2-16 illustrates the 500m walking distance coverage to a proposed local transit route. In summary, the majority of the ASPA is serviced within 500m of a proposed local transit route, which is in line with the Town's transit goals. A detailed description of the proposed local Milton Transit routes, with conceptual route numbers are provided below:

Modified Trafalgar RNA Proposed Transit Routes

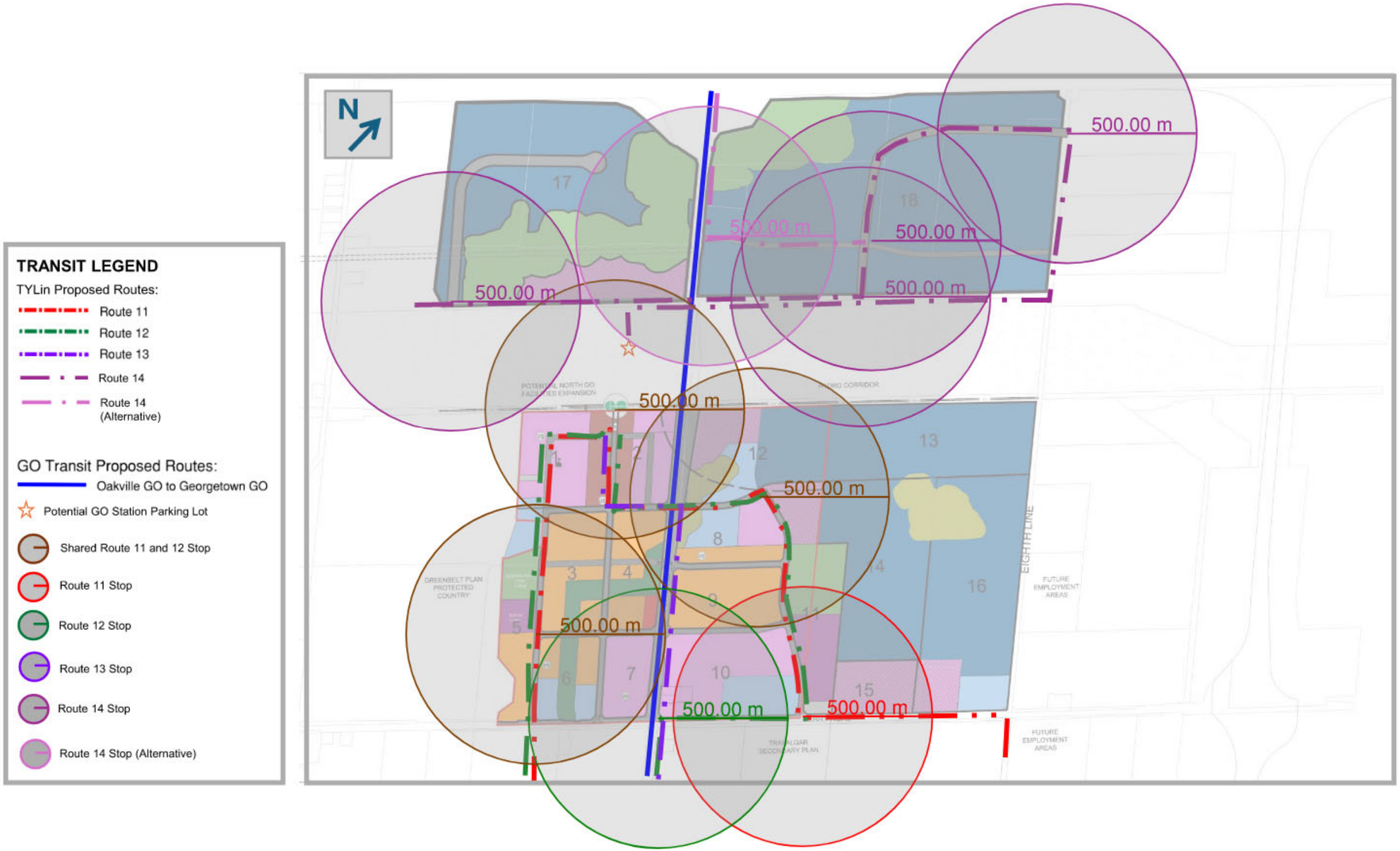
- **Route 11** would operate from the future GO Station and travel south to service the Agerton development on the west side of Trafalgar Road before continuing south into the Trafalgar development. The portion of the route located within the ASPA would service multiple blocks, including those located along Collector A, B, C, D, E, F and H. This route would connect riders from both SPAs to the GO Station where they can transfer to the existing and proposed GO Transit routes, or the proposed Milton Transit Routes 12 and 13.
- **Route 12** would operate from the future MEV transit hub and travel east along Britannia Road before heading north onto Trafalgar Road to service the future GO Station. The route would then travel south to service the Agerton development on the west side of Trafalgar Road before continuing west onto Derry Road and terminating at the Milton GO Station. The portion of the route located within the ASPA would serve the same blocks as Route 11. This route would allow riders to transfer to any of the proposed inter-regional transit routes, GO Transit routes, or local Milton Transit Routes (11 and 13).
- **Route 13** would operate from the future GO Station, travel south along Trafalgar Road, and terminate at the Trafalgar/407 GO Carpool lot. This route would allow riders from Milton and the Trafalgar area to transfer to Oakville Transit.

New Agerton Transit Routes

- **Route 14** would operate from the Milton GO Station and would be an amendment to the service currently provided along Route 2 by Milton Transit. Once Main Street East is extended into the ASPA, this route can proceed east along Main Street past Trafalgar Road, turn left onto proposed Collector N and eventually return to Main Street, where the route would terminate at the potential GO Station parking lot. An alternative path could be pursued to minimize impacts on existing customers using Route 2, which is illustrated in

Figure 2-15. Following the loop completed by the Milton Crossroads Centre, the route could turn right onto Steeles Avenue East until Trafalgar Road, where it would travel South to Auburn Road. Once along Auburn Road, Collector N could be used. Like the previously described routing, this iteration could still terminate at the new GO parking lot. Worth noting, the initial route features ample opportunities for bus stops and the service of employment uses along Collector I.

Figure 2-16 Transit Stop Servicing



[1] Note that this diagram was calibrated using an aerial measurement of Trafalgar Road to determine the 500-metre length for assessing route servicing in the ASP

2.2.5.3 Proposed Active Transportation Facility Review

Cycling and Pedestrian Facilities (Roadway Based)

As per the review of the proposed functional classification criteria for ROWs within the Town of Milton, under the 2025 TMP review and the Halton Region's IMP, the cycling and pedestrian facilities proposed for the ASPA are presented in **Table 2-1** below.

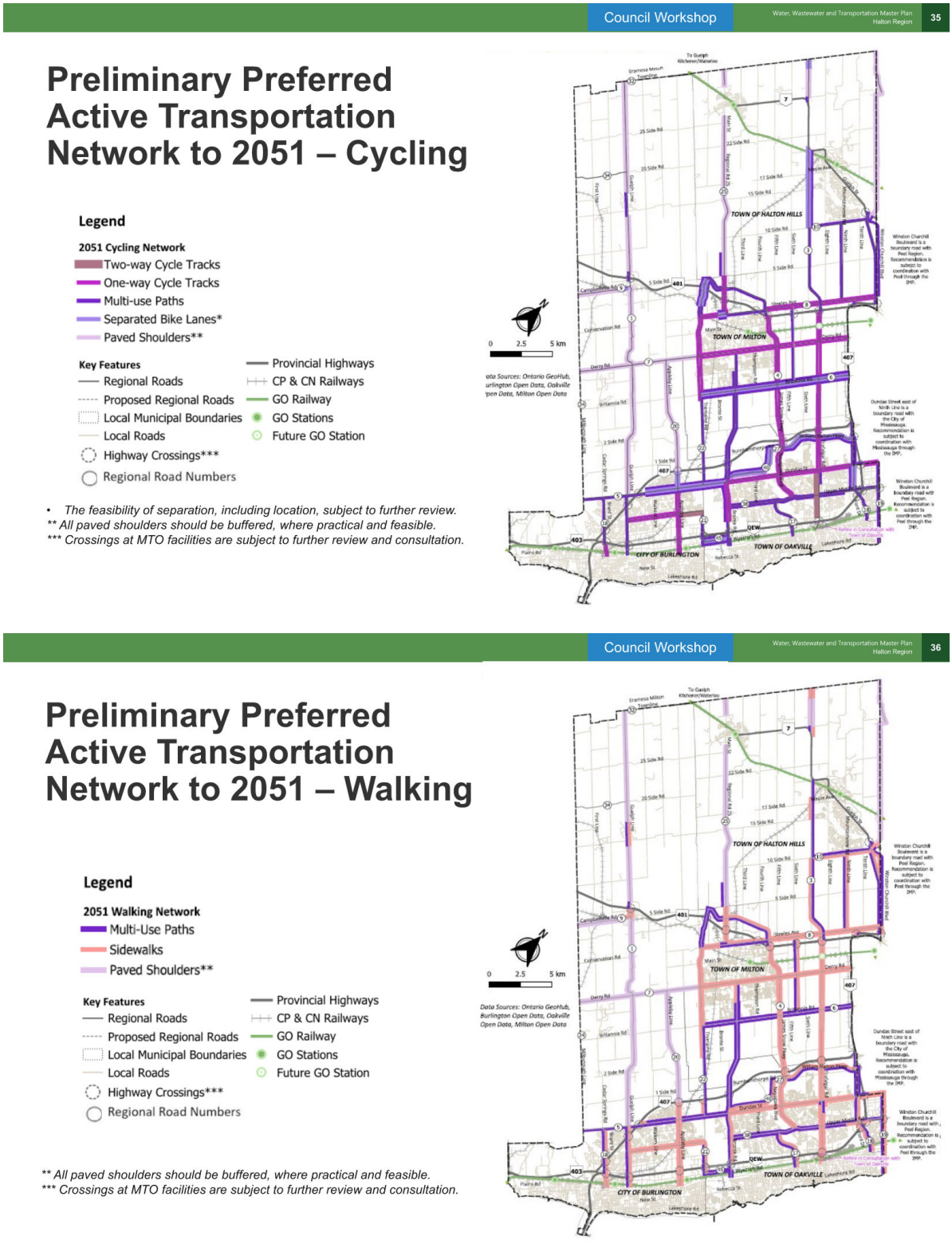
Table 2-1 ROW Elements Based on Width

Roadway Name	Width (metres)	Facilities & Features (Under 2025 TMP)
Local		
Z-1	18	Sidewalk (1.8m)
Z-2	18	Sidewalk (1.8m)
Z-5	18	Sidewalk (1.8m)
Z-9	18	Sidewalk (1.8m)
Collectors		
Auburn Road [1]	20	Sidewalk (1.8m)
Eighth Line [1]	20	Sidewalk (1.8m)
Collector A	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector B	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector C	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector D	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector E	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector F	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector H	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector I	22	Sidewalk (1.8m), Cycle Track (1.5m)
Collector N	22	Sidewalk (1.8m), Cycle Track (1.5m)
Arterial		
Derry Road	47	Sidewalk (1.8m), Cycle Track (2m)
Trafalgar Road	47	Sidewalk (1.8m), Cycle Track (2m)
Britannia Road	47	Multi-use Path, Separated Bike Lanes
Main Street	35	Sidewalk (1.8m), Cycle Track (2m)
Louis St. Laurent Avenue	35	Sidewalk (1.8m), Cycle Track (2m)

[1] The 2025 TMP Update does not provide a standard or recommended cross-section for a width of 20 metres. Therefore, the elements from the 18 metre ROW have been applied.

Figure 2-17 illustrates the 2051 preliminary active transportation network recommended for regional roads in Region's IMP.

Figure 2-17 Preliminary Active Transportation Network in 2051

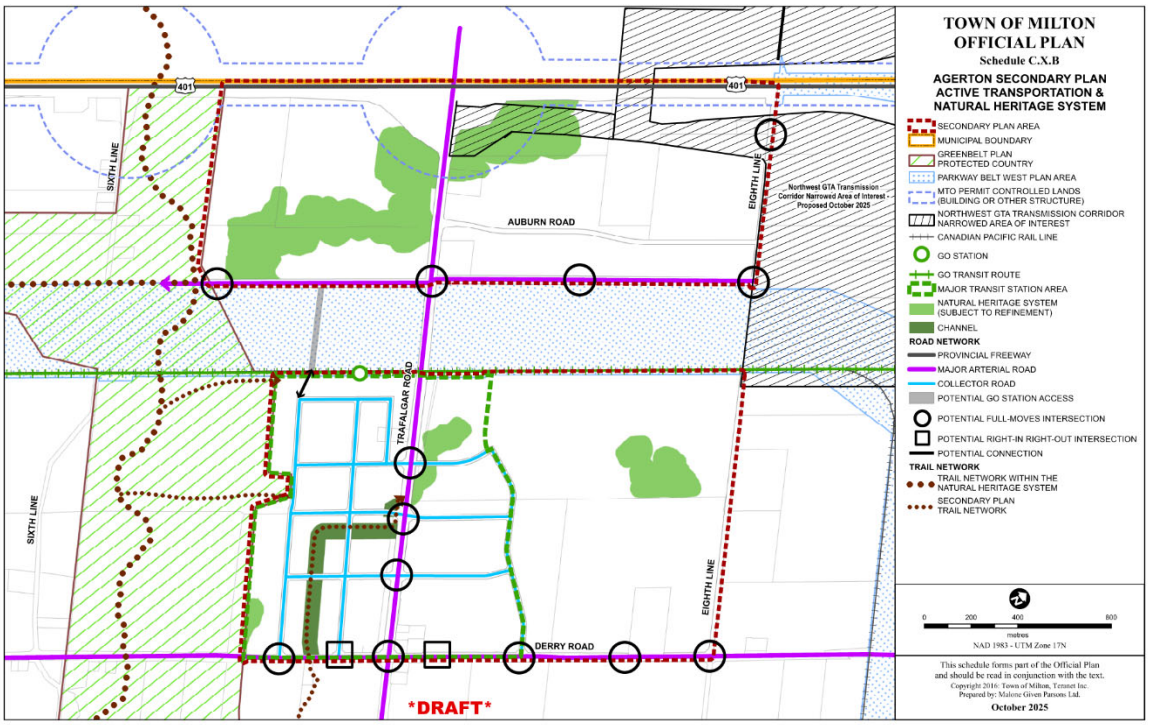


Source: Halton Region's Intergrated Master Plan

Natural Trail and Heritage System

According to Schedule C.X.B of the Agerton SP, multiple trails are available for AT users to access when navigating the ASPA. These facilities are shown in **Figure 2-18**. Based on the information presented in the SP, the degree of trail-based connections provided for north-south travel is strong, however, there appears to be a lack of this facility type facilitating east-west travel. Note that one portion of the trail system offers east-west travel; however, this portion is limited and does not support longer-distance travel. Despite the lack of natural heritage or trail system connections, the facilities described in the previous section will help bolster the ability of individuals to access the region via non-automotive means.

Figure 2-18 Natural Heritage System and Trails



2.2.5.4 Summary of Proposed Facilities and Takeaways

Based on the review conducted, the proposed AT facilities and recommended transit service are viewed as appropriate for the development being undertaken. In the case of AT infrastructure, the 2025 TMP prioritized the integration of separated facilities along most roadway types, enhancing the user experience of cyclists and individuals walking. As previously stated, during a more detailed design phase, modifications can be made to the elements proposed for each roadway.

Regarding transit, the routes derived from the RNA will connect individuals to various portions of the Town of Milton, connecting to key destinations including the proposed GO Station within the ASPA,

the existing Milton GO, in addition to the MEV transit hub. Worth noting, TYLin proposed that an additional route be provided for transit servicing within the ASPA to ensure employment-related uses located along Main Street and Eighth Line are captured and can make use of enhanced multi-modal offerings in the area.

2.3 Planning Context and Relevant Background Studies

The Agerton Secondary Plan has been developed within the context of provincial, regional, and municipal planning policies and initiatives. A plethora of transportation plans and studies that apply to the Trafalgar Tertiary Plan area have been summarized for reference purposes.

2.3.1 Halton Region Transportation Master Plan (2011)

In the Region's 2011 Transportation Master Plan, *The Road to Change*, it is stated that the TMP "provides the strategies, policies and tools for the development of a balanced and sustainable transportation system… and meet the Region's transportation needs safely, efficiently and cost effectively to 2031."

The 2011 TMP document also outlines the Vision and Guiding Principles that guided the TMP creation process. A key component of the TMP's Vision is to support a sustainable and multi-modal network that can accommodate a range of travel modes and choices. Such a network will provide those travelling in Halton Region with alternatives to single-occupant vehicle trips.

The TMP's five guiding principles are:

- **Balanced Needs** – provide choice for the travel needs of residents;
- **Healthy Communities** – support a healthy and active lifestyle;
- **Economic Vitality** – transportation will be a major contributor to the Region's prosperity;
- **Sustainability** – balance economic, social, and environmental goals; and
- **Well-Maintained Infrastructure** – keep the Region's infrastructure in a good state of repair.

The Region's TMP identified a 47 metre ROW for Trafalgar Road, Derry Road, and Britannia Road within the RNA study area. The future 47 metre ROW for the three existing Regional arterial roads has been incorporated into the Update analysis. In accordance with Halton Region standards, all existing and future regional intersections shall have a minimum daylighting triangle requirement of 15x15m.

Note that the Region is completing an update to the 2011 TMP through the Integrated Master Plan (see **Section 2.3.8**).

2.3.2 Halton Region Active Transportation Master Plan (2015)

The Region's Active Transportation Master Plan (ATMP), released in 2015, was created in support of the policies outlined in the Region's 2011 TMP. The ATMP states that it "outlines the strategy, infrastructure, initiatives, and programs required to create an AT plan that is safe, affordable, and sustainable".

The ATMP's Vision is as follows:

- The ATMP will help to promote an integrated, sustainable, accessible, affordable, and efficient multi-modal transportation network where AT will be a viable alternative to strengthen linkages between communities and municipalities.
- The transportation system identified to 2031 must accommodate growth in travel demand in a manner that supports the vision and guiding principles of the TMP while maintaining current levels of service.
- An increase in the use of AT as a year-round travel mode option available for all members of the community.
- The ATMP must guide the Region to meet the mode share target for active transportation of 5% of all p.m. peak hour trips by 2031 from less than 2% in 2011. This represents a seven-fold increase over the 1,600 p.m. peak hour trips made by cycling and walking in 2011 to 11,500 trips by 2031.

Note that the Region is completing an update to the 2015 ATMP through the Integrated Master Plan (see **Section 2.3.8**).

2.3.3 Town of Milton Transportation Master Plan Update (2025)

As of May 2025, the 2025 Milton TMP ("2025 Update") has been released, building on the existing vision expressed for the Town's transportation network in 2018. Input from Town staff and officials, alongside key stakeholders, including the public, was used to inform the direction of the TMP.

In keeping with the intent of the 2018 TMP, the 2025 Update continues to take a balanced approach to transportation investment in Milton. Underlying this, Milton is seeking to forge a multi-modal future within the community. The document provides policy context for the approach to achieving this vision, including an outline of capital improvements and additional studies, as required. It should be noted that there are some notable differences between the two plans pertaining to active transportation infrastructure, right-of-way (ROW) widths, and road classifications.

Elaborating, in the 2025 Update, the Town has recommended updated road classification and right-of-way widths to better accommodate the anticipated growth within Milton by incorporating active transportation infrastructure in urban areas. All ROWs except the laneway and rural roadway ROWs in the 2025 TMP were revised. One of the main differences is the revised ROWs in the 2025 document,

where on-street bicycle lanes were shifted to in-boulevard cycle tracks for all collector and arterial road cross-sections to provide that physical separation between cyclists and vehicles. This change also eliminates the multi-use paths that were previously identified in the 2018 TMP by incorporating and separating both sidewalks and cycle tracks to be provided on both sides of the collector and arterial roads. According to the 2018 TMP and Town standards, sidewalk widths were specified to be 1.5m for all local, collector, and arterial roads. In the 2025 Update, sidewalk widths were increased from 1.5m to 1.8m for all roadway types.

2.3.3.1 Milton TMP – Extension of Louis St. Laurent Avenue

Worth noting, the Town of Milton has planned for the extension of Louis St. Laurent Avenue from Britannia West to Trafalgar Road by 2051, as identified in the Britannia Secondary Plan (2024). Given that this work is projected to occur within the ultimate horizon associated with this Update, this infrastructure improvement is critical to mention. It is assumed that the extended portion of Louis St. Laurent Avenue will be designed as a 4-lane, 35 metre ROW arterial.

2.3.4 Town of Milton Transportation Master Plan for the Trafalgar and Agerton Secondary Plan (2019-2022)

The original TMP for the Trafalgar Agerton Secondary Plan was first completed in March 2019, with an updated version circulated in December 2020. The most recent version entails an Addendum completed in March 2022. Both have been reviewed as part of the preparation of the enclosed Agerton TMP Update.

The Trafalgar and Agerton TMP (2020) was prepared using the Town of Milton's 2018 TMP as a guiding document. This report further developed the traffic planning already in place for the TSPA and ASPA. The TMP (2020) assessed the high-level impacts of the proposed Trafalgar and Agerton Secondary Plans on the adjacent arterial roads, collector roads, and major intersections. Many of the existing study area intersections included in this Update were also analyzed in Trafalgar and Agerton TMP (2020).

The March 2022 TMP Addendum's analysis included 19,000 employees and 11,433 residential units, comprised of single detached dwellings, low-rise, and mid-rise developments. The March 2022 TMP Addendum concluded that should the projected future total volumes be actualized, a total of five study intersections are expected to experience capacity issues under future total conditions.

This includes the following intersections:

- Trafalgar Road and Highway 401 Eastbound Off-Ramp;
- Trafalgar Road and Derry Road;
- Trafalgar Road and Britannia Road;

- Trafalgar Road and E Lower Base Line; and
- Trafalgar Road and Main Street

The 2022 TMP Addendum recommends that in addition to applying signal timing optimization to study intersections, dedicated turning lanes, including dual left-turn lanes, can also be implemented to help improve operations for turning movements. Lane configuration-based improvements are reflected in **Figure 2-19,** which has been derived from the March 2022 Addendum. Despite these improvements, many intersections will continue to operate with over-capacity movements under future total conditions, should the projected volumes be actualized. Regarding the dedicated turn lane improvements, TMP (2022) recommends that the "rights-of-way requirement be protected now, and the intersections be monitored regularly through the Region's Traffic Count Program and be further considered in the future Municipal Class Environmental Assessment Studies."

A summary of the recommended intersection improvements for Derry Road, Trafalgar Road, Lower Base Line, and Eighth Line from the 2022 TMP has been summarized in **Table 2-2.**

Table 2-2 Non-Lane-Configuration Improvements: 2022 TMP Addendum

Intersection	Improvements
Trafalgar Road & Highway 401 EB Off-Ramp *(Signalized)*	▶ Removed land utilization penalty for the HOV lanes on Trafalgar (expected to terminate at GO Station near Main Street East)
Trafalgar Road & Derry Road *(Signalized)*	▶ Added overlap phases for all exclusive right-turn movements with the corresponding left-turn phases
Trafalgar Road & Britannia Road *(Signalized)*	▶ Added overlap phases for all exclusive right-turn movements with the corresponding left-turn phases
Trafalgar Road & Main Street *(Signalized)*	▶ Added overlap phases for all exclusive right-turn movements with the corresponding left-turn phases

Figure 2-19 Future Total Lane Configurations Figure 2022 TMP Addendum

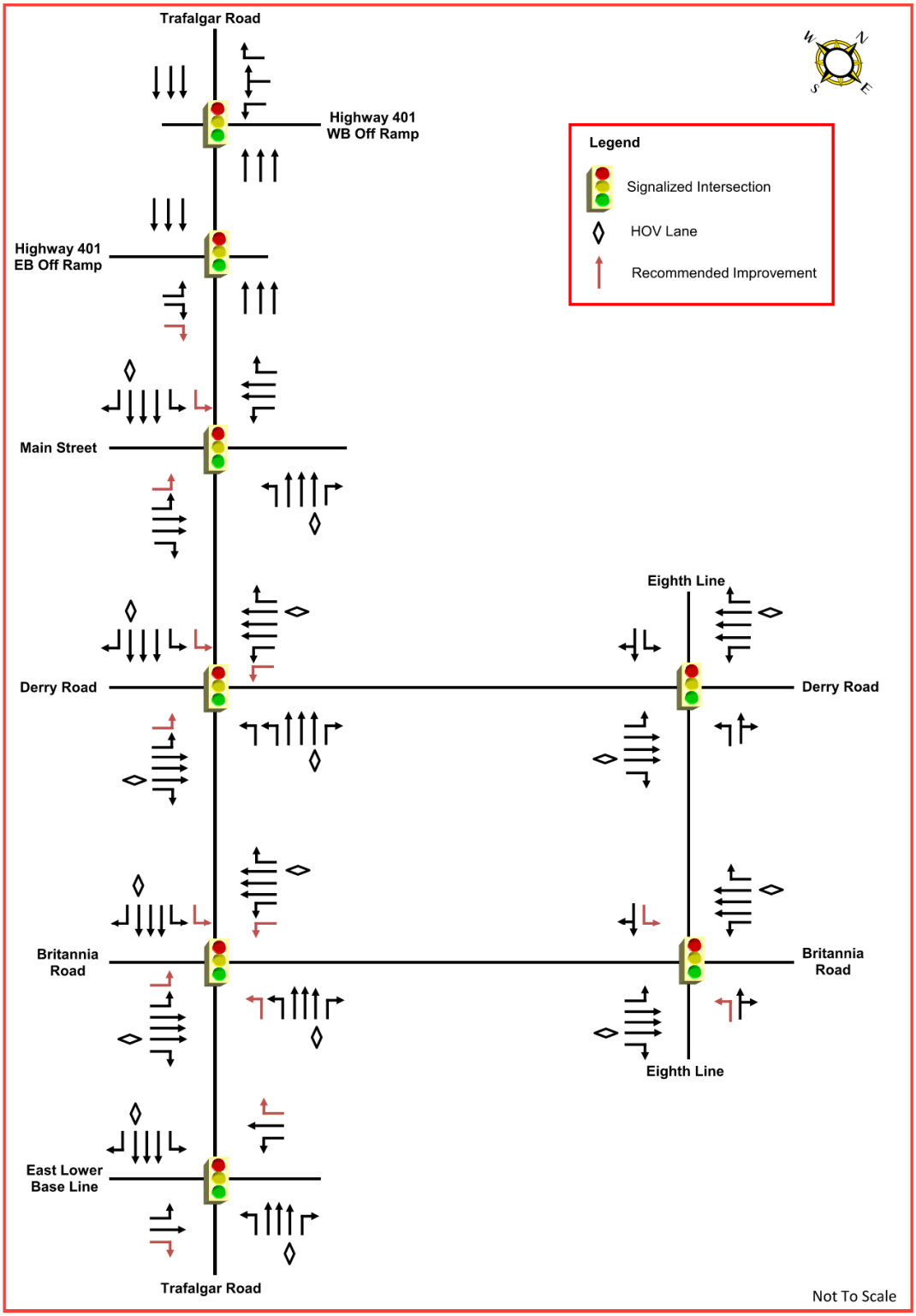


Figure 5-5
Future Total Lane Configurations with Recommended Improvements

2.3.5 Trafalgar Secondary Plan (2019, 2024)

The Trafalgar Secondary Plan was adopted by the Town of Milton on March 25, 2019 (By-law 030-2019) and has since been amended in accordance with Ontario Land Tribunal Orders issued on February 8, 2024 and July 22, 2024. The Tertiary Plan for the TSPA has been prepared in accordance with the goals and objectives of the Trafalgar Secondary Plan.

From a transportation perspective, the Secondary Plan document outlines several goals and objectives for the TSPA, resulting in the vision of a multi-modal, connected community, requiring a road network of complete streets that are accessible to all users. Three of the mobility goals listed in section C.11.3.2 of the Trafalgar Secondary Plan are:

- Foster a connected and accessible on- and off-road pedestrian and cycling path network which promotes a culture of active transportation;
- Provide the opportunity for a local transit network that can support higher-order transit service on Trafalgar Road;
- Realize a network of Complete Streets that balance the needs of all road users, including pedestrians, cyclists, transit users, and motorists.

The Trafalgar Tertiary Plan includes a robust collector road network that proposes modifications to the Town's standard right-of-way (ROW) collector road cross-sections. These modifications were discussed in greater detail within TYLin's Road Network Assessment (RNA) for the Trafalgar Tertiary Plan Area, which is outlined in **Section 2.4.3** of this Update. The Trafalgar Tertiary Plan Road Network Assessment proposed modifications often include active transportation elements, such as in-boulevard cycle tracks, buffered on-street cycle lanes, and Multi-use Paths (MUPs), that differ from the Town's ROW standards to better achieve the level of active transportation connectivity envisioned by the Secondary Plan.

In addition to ensuring active transportation infrastructure is available and accessible to all users, the proposed Trafalgar Tertiary Plan collector roads maintain general automobile travel lanes that are able to accommodate local transit vehicles (3.35m wide) while also providing on-street parking on at least one side of the road.

2.3.5.1 Planning Changes and Population Pledges: Trafalgar

In accordance with legislative planning changes over the last few years, the 2022 TSP aims to target 30% of its new residential units to be designated as either affordable housing, assisted housing, stacked townhouses, back-to-back townhouses or apartments.

Since the completion of the 2022 TMP Addendum, the Trafalgar Tertiary Plan has amended its forecasted population and employment to align with the Region's Joint Best Planning Estimates (JBPE). These values are derived from the Halton Region's ongoing Integrated Master Plan Update.

The original population figure of 26,000 people has increased to 54,681 people, which is an approximate 110% increase. Regarding the number of employees, the 2022 TMP Addendum forecasted 4,000 jobs while JBPE forecasted 6,807 jobs. This represents an approximate increase of 41%.

2.3.6 Agerton Secondary Plan

The latest information provided on the Town of Milton's engagement website (Let's Talk Milton) identifies that a public meeting was held in 2022 to acquire feedback on a draft of the Agerton SP. Previous engagement on the project occurred in January 2022 and July 2022.

Comments received in 2022, in addition to legislative and policy changes, impacted the drafting of a 2025 Agerton SP (June 2025). The Agerton SP is not currently approved, but echoes the same principles and goals identified within the Trafalgar SP. To illustrate the differing context of both SPs, consider the unique mobility goals identified in the Agerton document below:

- Create a multi-modal transit hub centred around a Major Transit Station that serves to connect people and goods within the Secondary Plan, other areas of the Town and surrounding urban areas in the Region;
- Identify Trafalgar Road and Derry Road corridors as Transit Priority Corridors to serve as key connectors and key Regional corridors to link people to existing and planned regional destinations and abutting municipalities.

2.3.6.1 Planning Changes and Population Pledges: Agerton

Since the completion of the 2022 TMP Addendum, the ASPA has amended its forecasted population and employment to align with the JBPE. As stated, these values are derived from the Halton Region's ongoing Integrated Master Plan Update. The original population figure of 6,800 people has increased to 6,978 people, representing an approximate 2.6% increase. Regarding the number of employees, the 2022 TMP Addendum forecasted 15,000 jobs, whereas JBPE figures forecasted 11,447 jobs. This represents an approximate decrease of 31%.

2.3.7 Summary of Population and Employment Changes: Trafalgar and Agerton

The values in **Table 2-3** and **Table 2-4** summarize the information provided in Sections **2.3.5.1** and **2.3.6.1**. For both tables, the numbers reflect the ultimate planning estimates under each horizon year.

Table 2-3 TSPA Population and Employment Forecasts

TZ	Population				Residential Units				Employment			
	2021	2031	2041	2051	2021	2031	2041	2051	2021	2031	2041	2051
685	33	3,051	7,447	8,824	11	985	2,537	3,156	8	236	736	766
686	41	4,291	10,522	12,474	14	1,381	3,581	4,459	81	629	1,674	1,744
687	18	1,675	4,105	4,866	5	537	1,395	1,737	15	146	389	402
688	22	2,055	5,024	5,953	7	663	1,711	2,128	49	271	596	612
689	4	2,838	7,115	8,453	1	895	2,407	3,011	0	172	572	594
690	0	1,727	4,343	5,161	0	543	1,469	1,838	0	105	350	363
691	16	3,047	7,543	8,950	6	973	2,561	3,195	105	892	2,230	2,326
Total	**134**	**18,684**	**46,099**	**54,681**	**44**	**5,977**	**15,661**	**19,524**	**258**	**2,451**	**6,547**	**6,807**

Table 2-4 ASPA Population and Employment Forecasts

TZ	Population				Residential Units				Employment			
	2021	2031	2041	2051	2021	2031	2041	2051	2021	2031	2041	2051
694	7	2,243	4,415	4,778	2	951	1,765	1,933	0	1,164	2,057	2,863
696	8	1,030	2,023	2,188	3	437	809	885	0	532	940	1,308
516	8	8	8	8	3	3	3	3	0	909	1,445	2,797
517	0	0	0	0	0	0	0	0	0	483	856	1,879
518	4	4	4	4	1	1	1	1	0	569	1,002	2,600
Total	**27**	**3,285**	**6,450**	**6,978**	**9**	**1,392**	**2,578**	**2,822**	**0**	**3,657**	**6,300**	**11,447**

2.3.8 Region of Halton Integrated Master Plan

The Region of Halton's Integrated Master Plan (IMP) is a long-term plan that aims to expand water, wastewater, and transportation infrastructure to accommodate the growing population in the local municipalities within the Region to 2051 and beyond. The IMP states that it will:

- Guide the management and development of the Region's water, wastewater and transportation systems (including the active transportation network and master plan);
- Maximize capacity, system flexibility and extend the life expectancy of Regional water, wastewater and transportation infrastructure; and
- Outline the strategies for maintaining and improving these critical systems to ensure we meet the needs of the community now and in the future.

A selection of transportation strategies was also outlined in the IMP, which apply to the Update:

- Optimizing existing/planned transportation network;
- Localized corridor widening and improvements;

- Flexibility and adaptability to support the evolution of Transit Priority Corridors;
- Prioritizing walking and cycling facilities, including at intersections;
- Identifying supporting strategies and technologies (for example, transit signal priority).

2.4 Relevant Background Studies

Numerous studies have previously been completed within the study area to identify improvements required because of ongoing and future developments within the Town. A summary of the planning context and relevant background studies is provided in this section in order of completion.

2.4.1 Britannia Road Transportation Corridor Environmental Assessment (2014)

A Schedule 'C' Class Environmental Assessment (EA) was completed by Halton Region to identify transportation corridor improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407 by balancing the potential impacts on natural, socio-economic and cultural environments.

Based on the EA assessment, proceeding with Britannia Road widening from two lanes to the ultimate six-lane configuration (47m ROW) from Regional Road 25 to Highway 407 immediately (Alternative 2) was selected as the preferred alternative. The widening work along Britannia Road, which was previously under construction and anticipated for completed in 2024, has since been completed at the time of this report.

2.4.2 Trafalgar GO Station

The Trafalgar GO Station is a significant transit development within the vicinity of the subject site. It is proposed to be located within the ASPA, north of the Trafalgar Tertiary Plan area. The Trafalgar GO Station is to be located within the Major Transit Station Area (MTSA) to provide an effective rail connection for users. In particular, the MTSA is planned to have high-density employment and residential areas. As per the 2025 ASP, an overall minimum density of 180 residents and jobs combined per gross hectare is to be achieved within the MTSA. This translates to 14,100 people and 9,000 jobs by the ultimate horizon.

As per the Traffic Update to the Trafalgar and Agerton 2022 TMP, the preferred location for the proposed Trafalgar GO Station is west of Trafalgar Road along the existing rail line.

2.4.3 Trafalgar Tertiary Plan Road Network Assessment (Nov. 2025)

TYLin was retained by the MP4 Landowners Group (MP4T LOG) to prepare a Road Network Assessment determining traffic operations concerns, mitigation measures and infrastructure improvements required to support population and employment growth within the Milton Phase 4 Trafalgar Tertiary Plan. Key takeaways of the RNA study include the following:

- Existing study intersections generally operate with reserve capacity under Base Line conditions, yet some individual movements exceed Halton Region definitions of a critical movement;
- No major operations issues are expected in the 2031 future background or future total conditions scenarios, with all existing intersections predicted to operate well with reserve capacity and acceptable delays during a.m. and p.m. peak periods;
- Under 2041, future total full build-out conditions, intersections including Trafalgar at Britannia and Trafalgar at Lower Base Line, are predicted to operate with several movements over theoretical capacity during a.m. and p.m. peak periods;
- Under 2051, future total full build-out conditions, Trafalgar Road at Derry Road, in addition to the above-mentioned intersections, are operating over theoretical capacity during a.m. and p.m. peaks;
- Although a plethora of movements are expected to operate at and above capacity in the 2051 and 2041 future total scenarios, the difficulty of removing Trafalgar site traffic from the 2051 JBPE forecasting model growth rates resulted in double counting, which overestimates traffic volumes[1];
- TYLin stated that each development proposed for the corridor and Trafalgar area be subject to an individual TIS to ensure appropriate pacing of development to not inundate the road network.

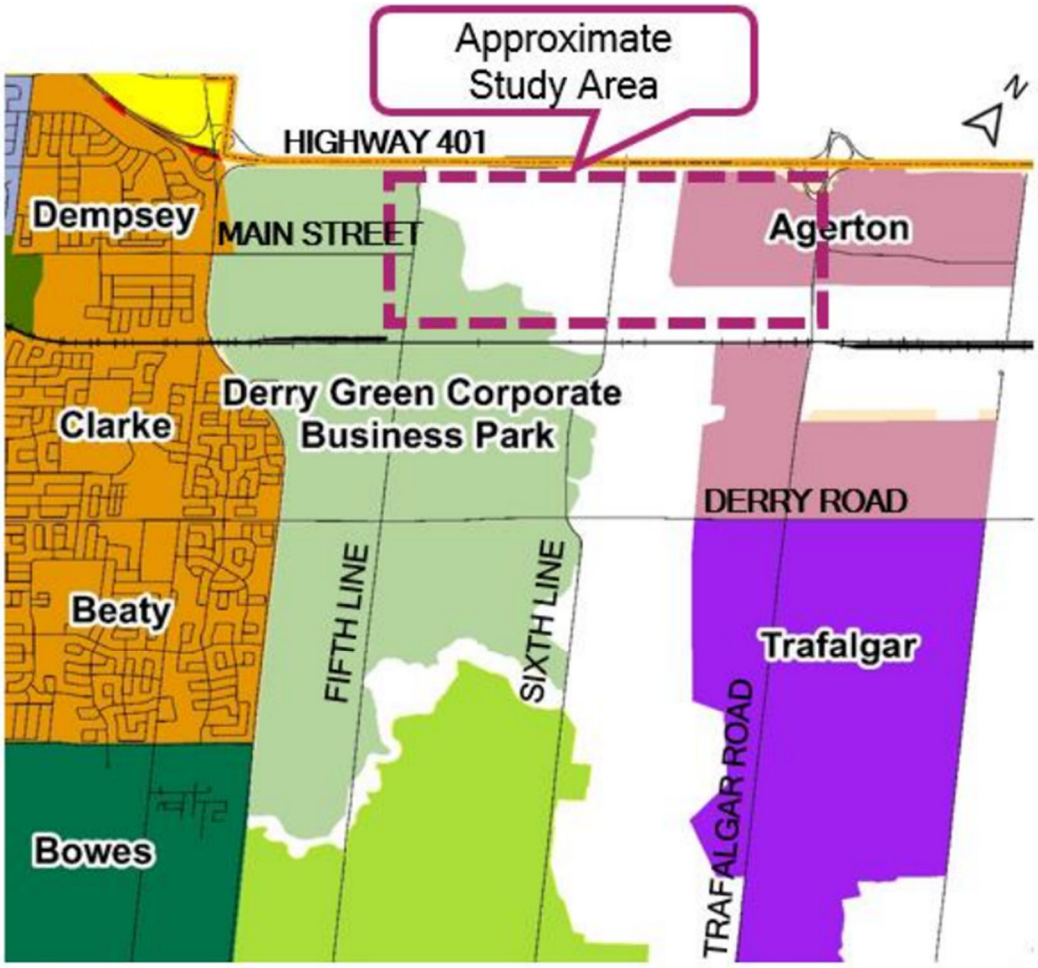
2.4.4 Main Street Extension Environmental Assessment (2025)

The Town of Milton is currently undertaking the preparation of a Schedule 'C' MCEA for Main Street between Fifth Line and Trafalgar Road. At present, the Town has identified the need for an extension to support east-west connectivity between the ASPA and Derry Green Corporate Business Park. The approximate boundary of this study is shown in **Figure 2-20** below. Note that the extended road is assumed to be a 4-lane, 35 metre ROW arterial. It is noted that the Main Street connection between Fifth Line and Trafalgar Road is not assumed to be constructed until the 2041 design horizon, per provided Town of Milton development planning. The EA for this extension is currently underway, with the segment between Sixth Line and Trafalgar anticipated to be completed beyond 2035. Based on assumptions previously documented in the RNA, Main Street is assumed to intersect Trafalgar Road south of its current intersection with Auburn Road, though a specific intersection point is still to be determined.

[1] For this Update, the Region has been consulted to address and mitigate double counting.

An initial online engagement session took place in October 2024 to identify design considerations and constraints. Forthcoming public meetings related to the potential future road alignment, cross-sections, and preliminary designs are yet to occur. The study will identify opportunities within the study area to curate a range of multi-modal transportation alternatives to support future travel demand, which will have impacts for traffic operations in the ASPA and TSPA.

Figure 2-20 Town of Milton Official Plan Land Uses and Main Street MCEA Area



Source: Town of Milton Main Street EA - Online Engagement - October 2024

2.4.5 Halton Region's Access By-Law No. 32-17

The TMP Update will consider Halton Region's Access By-Law. Elaborating, Section 6.1 (a) of the By-Law states that access to a Regional Road (Trafalgar within the Agerton SPA) from private property is to be permitted only where such access is necessary because access from a local road is not feasible.

2.4.6 Halton Region's Access Management Guidelines (2015)

The TMP Update will consider Halton Region's Access Management Guidelines (2015). Main takeaways from this document are to ensure safety mechanisms are in place for vehicles using accesses, ensuring sufficient sight distances are provided and that appropriate lane configurations are employed at access locations to mitigate and prevent collisions.

2.5 Existing Traffic Data

Existing turning movement counts (TMCs) were collected on May 28th, 2025 for both the weekday a.m. and p.m. peak periods. A summary of each intersection, including peak hours, is provided in **Table 2-5**. The traffic volumes used to conduct capacity and queuing analysis are illustrated in **Figure 2-21**. The existing signal timing plans and existing traffic data are provided in **Appendix A**.

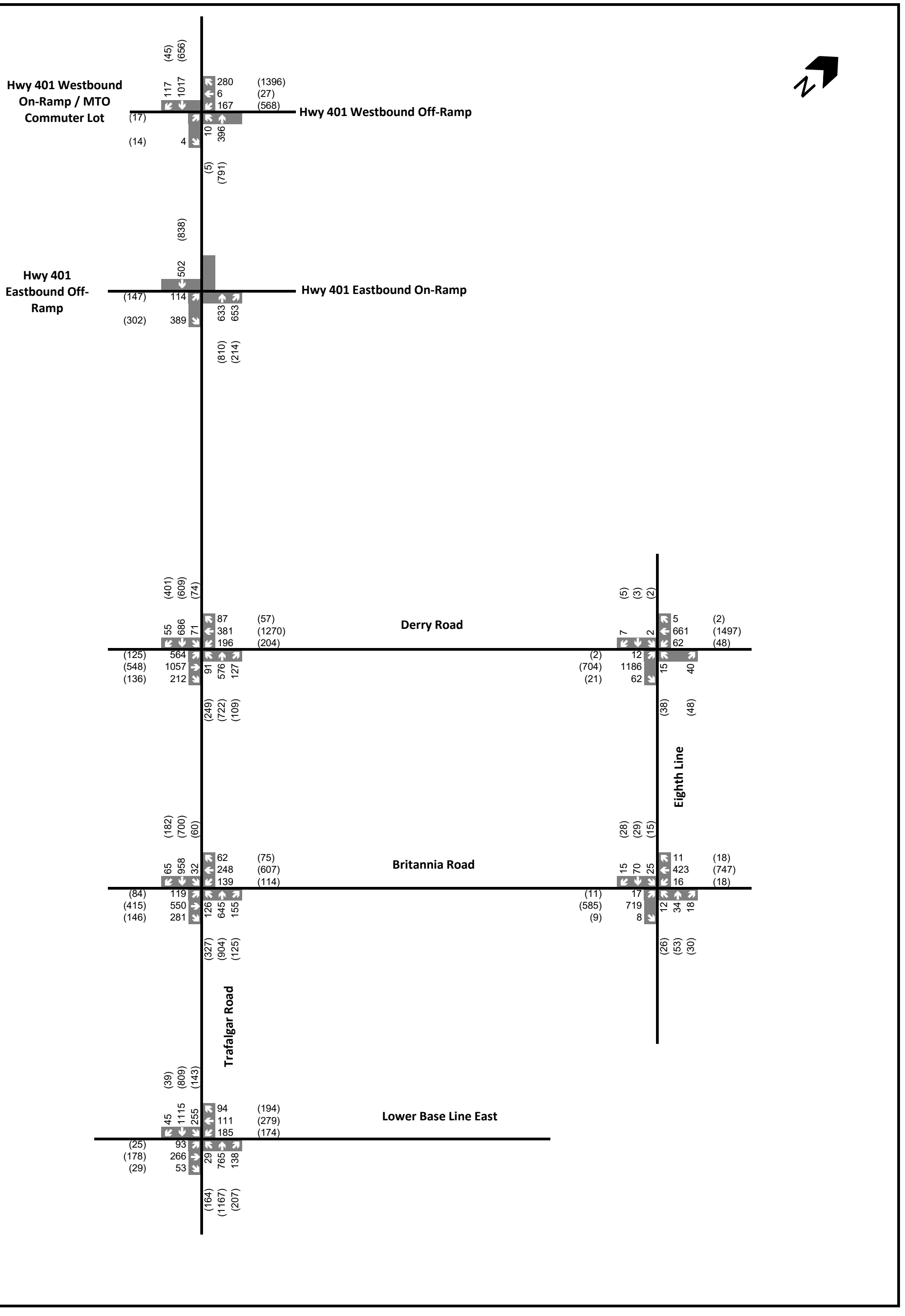
Table 2-5 Intersection Turning Movement Count Summary

No.	Intersection	Control	TMC Count Date	Peak Hours	
				AM	PM
1	Derry Road and Trafalgar Road	Signalized Intersection	May 28th, 2025	7:45-8:45	4:45-5:45
2	Derry Road and Eighth Line	Unsignalized Intersection	May 28th, 2025	7:45-8:45	4:45-5:45
3	Britannia Road and Trafalgar Road	Signalized Intersection	May 28th, 2025	8:00-9:00	4:45-5:45
4	Britannia Road and Eighth Line	Signalized Intersection	May 28th, 2025	8:00-9:00	4:30-5:30
5	Lower Base Line and Trafalgar Road	Signalized Intersection	May 28th, 2025	8:00-9:00	4:45-5:45
6	Highway 401 WB Off-Ramp and Trafalgar Road	Signalized Intersection	May 28th, 2025	7:30-8:30	4:45-5:45
7	Highway 401 EB Off-Ramp and Trafalgar Road	Signalized Intersection	May 28th, 2025	7:30-8:30	4:30-5:30

Supporting signal timing plans (STP) were provided by Halton Region for the intersections identified below. Note that the accompanying date is provided for each intersection:

- Britannia Road and Trafalgar Road – October 24th, 2025
- Derry Road and Trafalgar Road – November 10th, 2025
- Lower Base Line and Trafalgar Road – June 3rd, 2017

- Highway 401 (North Terminal or WB Off-Ramp) and Trafalgar Road – January 10th, 2025
- Highway 401 (South Terminal or EB Off-Ramp) and Trafalgar Road – August 23rd. 2025
- Britannia Road and Eighth Line – January 6th, 2025



TYLin

Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 2-21

Existing Traffic Volumes
External Intersections

2.6 Existing Intersection Capacity and Queuing Analysis

2.6.1 Intersection Capacity and Queuing Parameters

The traffic capacity analysis identifies how well the intersections and access driveways are operating and how they are expected to operate in the future. The analysis contained in this report utilized the Highway Capacity Manual (HCM) methodology within the Synchro Software package. The reported intersection volume-to-capacity ratios (v/c) are a measure of the saturation volume for each turning movement, while the levels-of-service (LOS) are a measure of the average delay for each turning movement.

Existing signal timings were modeled based on signal timing plans provided by Halton Region in February 2026. To maintain consistency with the recently approved Trafalgar Tertiary Plan RNA, Synchro parameters were adjusted to match assumptions detailed in that report, including lost time adjustments at three key intersections on Trafalgar Road (Derry Road, Britannia Road, and Lower Base Line).

As part of the capacity analysis, TYLin detailed the traffic operation at all turning movements at the study intersections. Critical turning movements were bolded in the summary table, identified as per Halton Region guidelines:

- Volume/capacity (V/C) ratios for overall intersection operations, through movements, or shared through/turning movements increased to 0.85 or above:
- V/C ratios for exclusive movements increased to 0.95 or above; or
- Queues for an individual movement are projected to exceed available turn-lane storage.

The analysis should also include unsignalized intersections where:

- Level of service (LOS), based on average delay per vehicle, on individual movements, exceeds LOS "D", or
- The estimated 95th percentile queue length for an individual movement exceeds the available queue storage.

2.6.2 Existing Conditions Results

The following tables **Table 2-6** and **Table 2-7** summarize the Synchro/HCM capacity and queuing results for the study intersections during the weekday a.m. and p.m. peak hours under existing conditions for the Base Line 2025 year. Queue reports detail locations where queues *exceed* available storage. Detailed Synchro reports are attached in **Appendix B**.

Table 2-6 Existing Capacity Analysis Summary

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	*0.85*	*41*	*D*	**0.90**	*48*	*D*
	EBL	0.91	41	D	0.58	35	D
	EBT	0.68	34	C	0.41	31	C
	EBR	0.14	24	C	0.09	27	C
	WBL	0.70	40	D	0.50	24	C
	WBTR	0.49	43	D	**0.99**	64	E
	NBL	0.44	36	D	0.86	54	D
	NBTR	0.74	49	D	0.81	49	D
	SBL	0.40	38	D	0.38	35	C
	SBT	0.76	52	D	0.64	45	D
	SBR	0.04	38	D	0.56	45	D
Eighth Line & Derry Road (Unsignalized)	EBL	0.02	10	B	0.00	13	B
	EBTR	0.48	0	A	0.28	0	A
	WBL	0.12	13	B	0.05	9	A
	WBTR	0.27	0	A	0.59	0	A
	NBL	0.34	**115**	**F**	0.58	**118**	**F**
	NBTR	0.10	15	B	0.08	11	B
	SBL	0.05	**94**	**F**	0.06	**129**	**F**
	SBTR	0.01	11	B	0.10	**56**	**F**
Trafalgar Road & Britannia Road	*Overall*	*0.55*	*36*	*D*	*0.67*	*39*	*D*
	EBL	0.38	50	D	0.49	51	D
	EBT	0.67	65	E	0.51	61	E
	EBR	0.29	59	E	0.10	57	E
	WBL	0.60	53	D	0.45	49	D
	WBT	0.30	59	E	0.71	65	E
	WBR	0.04	56	E	0.05	55	E
	NBL	0.41	15	B	0.68	22	C
	NBTR	0.40	18	B	0.52	20	B
	SBL	0.09	13	B	0.21	22	C
	SBTR	0.53	22	C	0.60	35	C
Eighth Line & Britannia Road	*Overall*	*0.29*	*6*	*A*	*0.27*	*6*	*A*
	EBL	0.04	4	A	0.03	4	A
	EBT	0.28	5	A	0.21	5	A
	EBR	0.01	4	A	0.01	4	A
	WBL	0.05	4	A	0.04	4	A
	WBTR	0.17	4	A	0.28	5	A
	NBL	0.07	15	B	0.13	15	B
	NBTR	0.17	15	B	0.26	16	B
	SBL	0.14	15	B	0.08	15	B

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	SBTR	0.33	16	B	0.14	15	B
Trafalgar Road & Lower Base Line	*Overall*	*0.73*	*34*	*C*	*0.84*	*36*	*D*
	EBL	0.37	47	D	0.31	51	D
	EBTR	0.74	58	E	0.54	51	D
	WBL	0.72	44	D	0.57	39	D
	WBTR	0.31	33	C	0.82	53	D
	NBL	0.16	23	C	0.47	17	B
	NBTR	0.66	35	C	0.84	36	D
	SBL	0.71	27	C	0.69	44	D
	SBTR	0.67	27	C	0.52	25	C
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.48*	*21*	*C*	***0.92***	*49*	*D*
	EBL	0.00	0	0	0.32	65	E
	EBR	0.00	66	E	0.01	61	E
	WBL	0.64	63	E	0.37	23	C
	WBT	0.03	56	E	0.03	19	B
	WBR	0.12	56	E	**0.99**	58	E
	NBL	0.03	6	A	0.04	35	C
	NBT	0.19	6	A	0.81	50	D
	SBT	0.47	11	B	0.77	52	D
	SBR	0.10	8	A	0.04	37	D
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.29*	*13*	*B*	*0.42*	*12*	*B*
	EBL	0.36	32	C	0.53	32	C
	EBR	0.15	31	C	0.37	32	C
	NBT	0.28	5	A	0.39	6	A
	SBT	0.23	5	A	0.40	6	A

Under existing conditions, all study area intersections operate with overall reserve capacity and acceptable delays during both the weekday a.m. and p.m. peak hours, with some exceptions. Although select movements experience LOS F, the corresponding v/c ratio is less than 1.0 during both peak hours, indicating reserve capacity remains.

At the intersection of Trafalgar Road and Derry Road, the westbound through/right movement is approaching capacity, operating with a v/c ratio of 0.99. At the intersection of Trafalgar Road and Hwy 401 Westbound On/Off-ramps, the westbound right movement is approaching theoretical capacity during the p.m. peak hour, operating with a v/c ratio of 0.99.

Table 2-7 Existing Queueing Analysis: Critical Movements

Intersection	Movement	Proposed Storage (m)	Weekday A.M. Peak Hour		Weekday P.M. Peak Hour	
			50th Percentile Queue	95th Percentile Queue	50th Percentile Queue	95th Percentile Queue
Trafalgar Road & Derry Road	EBL	110	105	**161**	-	-
	NBL	65	-	-	47	**77**
	SBR	70	-	-	47	**85**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-Ramp	WBR	80	-	-	**224**	**909**

Under existing conditions, several movements are shown to have 95th percentile queues exceeding available storage. These movements include the eastbound and northbound left-turn movements at the intersection of Trafalgar Road and Derry Road, as well as the southbound right-turn movement. At Trafalgar Road's intersection with the Highway 401 north junction, the westbound right-movement is shown to exceed available storage. It should be noted that while this queue exceeds the officially striped right-turn storage length, the queue is not shown to extend to the Highway mainline.

3 FUTURE BACKGROUND CONDITIONS

3.1 Study Horizon Years

Based on discussions with Town and Region Staff, future study horizon years of 2031, 2041, and 2051 were selected for traffic analysis purposes. The ultimate horizon year of 2051 also aligns with the Region's latest EMME modeling.

3.2 Background Corridor Growth

Through consultation with the Region, TYLin was provided with annual growth rates to be applied to segments of Regional Roads within the study area for each horizon year. The growth rates provided were derived from screenline analysis. The growth rates provided by the Region included traffic associated with the Agerton and Trafalgar Secondary Plan areas, along with future Trafalgar GO Station traffic. The original growth rates for each Regional Corridor provided to TYLin are located in **Appendix C**.

The growth rate methodology used in this study was based on the available data provided by the Region. The approach was subject to adjustments required for growth attributed to Trafalgar lands, for which key data was not available. The methodology implemented by TYLin accounts for both regional growth, which includes surrounding area development, and traffic associated specifically with the Agerton Secondary Plan. As such the resulting growth rate analysis calculation is considered reasonable and appropriate in achieving growth applied to the study road network. The applied growth methodology used is detailed below.

It is noted that the Region's screenline analysis did not calculate a growth rate for the segment of Trafalgar Road between Derry Road and Britannia Road. Accordingly, TYLin was instructed to apply the same growth rates provided for the segment of Trafalgar Road south of Britannia Road.

In order to not "double count" site traffic from the Agerton Secondary Plan through the application of the Region's rates "as is" and then assigning newly estimated Agerton site traffic to the study road network, TYLin made use of a portion of the Region's EMME model that was made available. Only the study area road network north of Britannia Road and the O-D matrices for TAZs within the Agerton Secondary Plan area were provided to TYLin. O-D matrices for TAZs within the Trafalgar Secondary Plan area were not included in the EMME modeling data provided by the Region.

In an effort to isolate the impact of Agerton site traffic on the Region's background growth rates, TYLin ran the EMME model for the Agerton study area with and without the Agerton O-D Matrices included to estimate background growth rates at each screenline, with and without Agerton site traffic. The difference between the two data sets was calculated and then applied to the original growth rates provided by the Region. The resulting modified growth rates are provided in **Appendix**

C. As TYLin's EMME model network did not include Britannia Road, the original growth rates provided by the Region were maintained.

The Region's original growth rates and TYLin's modified rates for corridor segments included in TYLin's EMME modeling were used to inform minor updates to growth rates for the corridor segments/screenlines that were not included in the EMME road network (Britannia Road east and west of Trafalgar Road, and Trafalgar Road south of Britannia Road). The results of these updates to the growth rates are provided in **Appendix C**.

In order to apply growth rates to the Town's roads within the study area (Eighth Line and Lower Base Line), the growth rates and associated methodologies described in the November 2025 Trafalgar RNA were adopted. Details of the growth rates applied to the Town roads are provided in **Appendix C**. The resultant growth rates applied to the study area road network for each horizon year are detailed in **Table 3-1**.

Table 3-1 Background Growth Rates

Corridor	Existing to 2031	2031 to 2041	2041 to 2051
Trafalgar Rd between Derry Rd and Hwy 401	1.2%	0.2%	0.4%
Trafalgar Rd south of Britannia Rd	6.2%	0.7%	2.0%
Trafalgar Rd between Derry Rd and Britannia Rd	6.2%	0.7%	2.0%
Derry Rd west of Trafalgar Rd	3.7%	2.4%	0.2%
Derry Rd east of Trafalgar Rd	3.8%	1.3%	0.5%
Britannia Rd west of Trafalgar Rd	4.35%	2.7%	0.6%
Britannia Rd east of Trafalgar Rd	4.4%	1.65%	0.75%
Eighth Line south of Derry Rd	2.65%	2.2%	3.0%
Eighth Line north of Derry Rd	2.65%	1.7%	1.4%
Lower Base Line west of Trafalgar Rd	2.65%	4.2%	1.6%
Lower Base Line east of Trafalgar Rd	2.65%	3.2%	1.8%

The background growth rates summarized in **Table 3-1** were applied to all movements at existing intersections and to through traffic at future arterial-to-collector road intersections.

3.3 Background Developments

Specific background developments in proximity to the Agerton Secondary Plan, excluding the Trafalgar Tertiary Plan immediately south of Derry Road, were not identified for the purposes of being explicitly included in the enclosed analysis. It was assumed that any significant sources of future background traffic volumes were accounted for in the growth rates provided by the Region for each horizon year. The Region also noted that traffic associated with the future Trafalgar GO Station was also included in the annual growth rates.

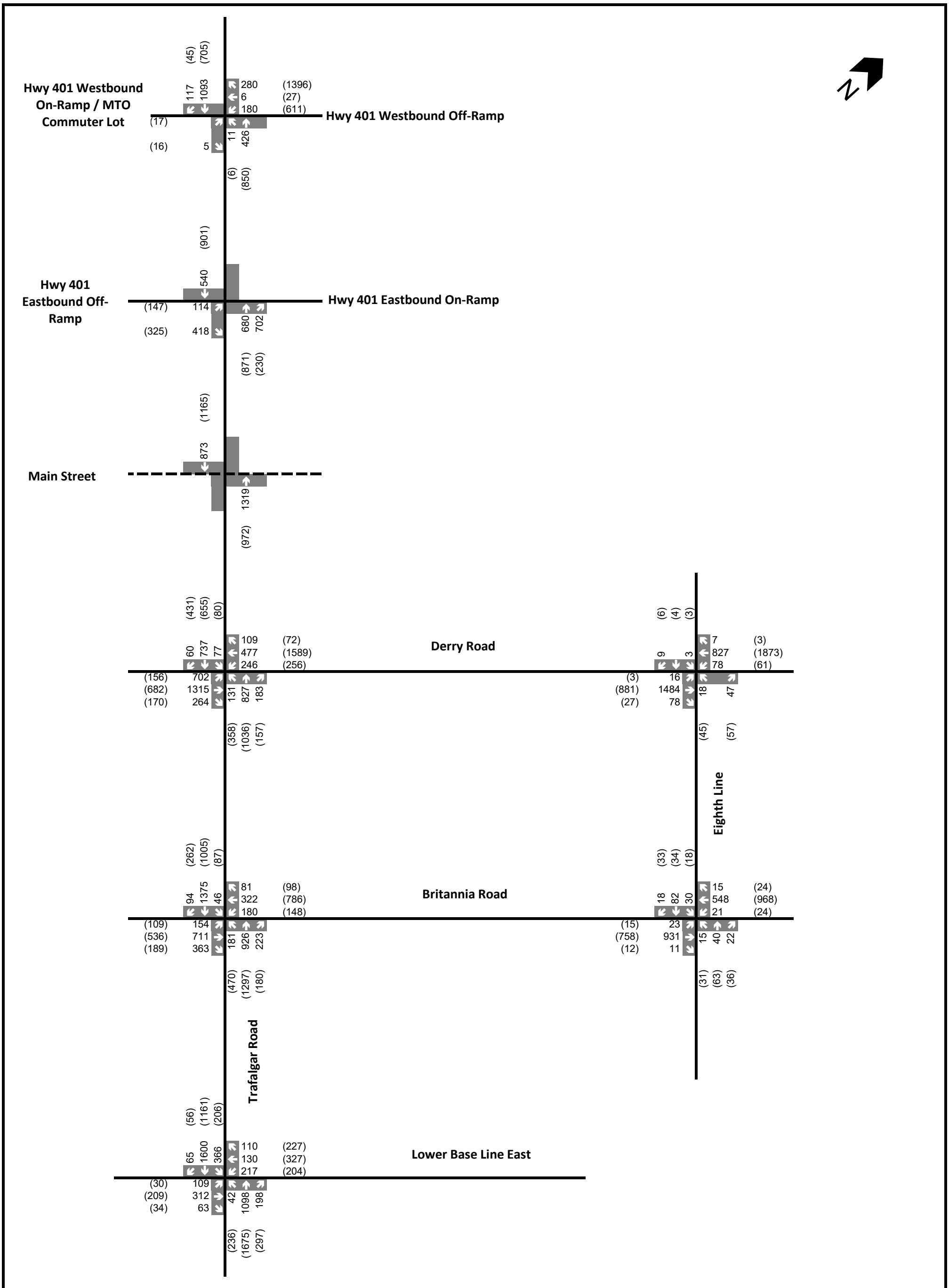
Through consultation with the reviewing agencies, it was determined that the site traffic from the Trafalgar Tertiary Plan, as developed through TYLin's Trafalgar RNA report, would be accounted for as background development traffic. However, as noted previously, the EMME modeling information provided to TYLin did not provide separate O-D matrices for the Trafalgar area, meaning trips attributable to Trafalgar could not be removed from TYLin's EMME modeling calculations. In an effort to avoid "double counting" Trafalgar-based traffic already accounted for in the Region's EMME-based growth rates, Trafalgar site traffic extracted from the November 2025 Trafalgar RNA was only applied to select intersections and movements that did not already have background growth rates applied.

3.4 Future Background Traffic Volumes

For each horizon year, annual background corridor growth rates were applied to the existing traffic volumes or the resulting grown background volumes of the previous horizon year, as per the information provided in **Table 3-1**. Turning movements from the Trafalgar Tertiary Plan's site traffic, as outlined in TYLin's November 2025 Trafalgar RNA, were then added to the grown background traffic to produce future background traffic volumes for each horizon year.

The resulting 2031, 2041 and 2051 future background volumes are provided in **Figure 3-1**, **Figure 3-2**, and **Figure 3-3**, respectively.

Future background lane configurations were updated based on planned and recommended improvements detailed in Section 2.3 (Planning Context and Relevant Background Studies) of this report. Lane configuration figures for the future background road network are provided in **Figure 3-4**, **Figure 3-5**, and **Figure 3-6** for the 2031, 2041, and 2051 horizon years, respectively.

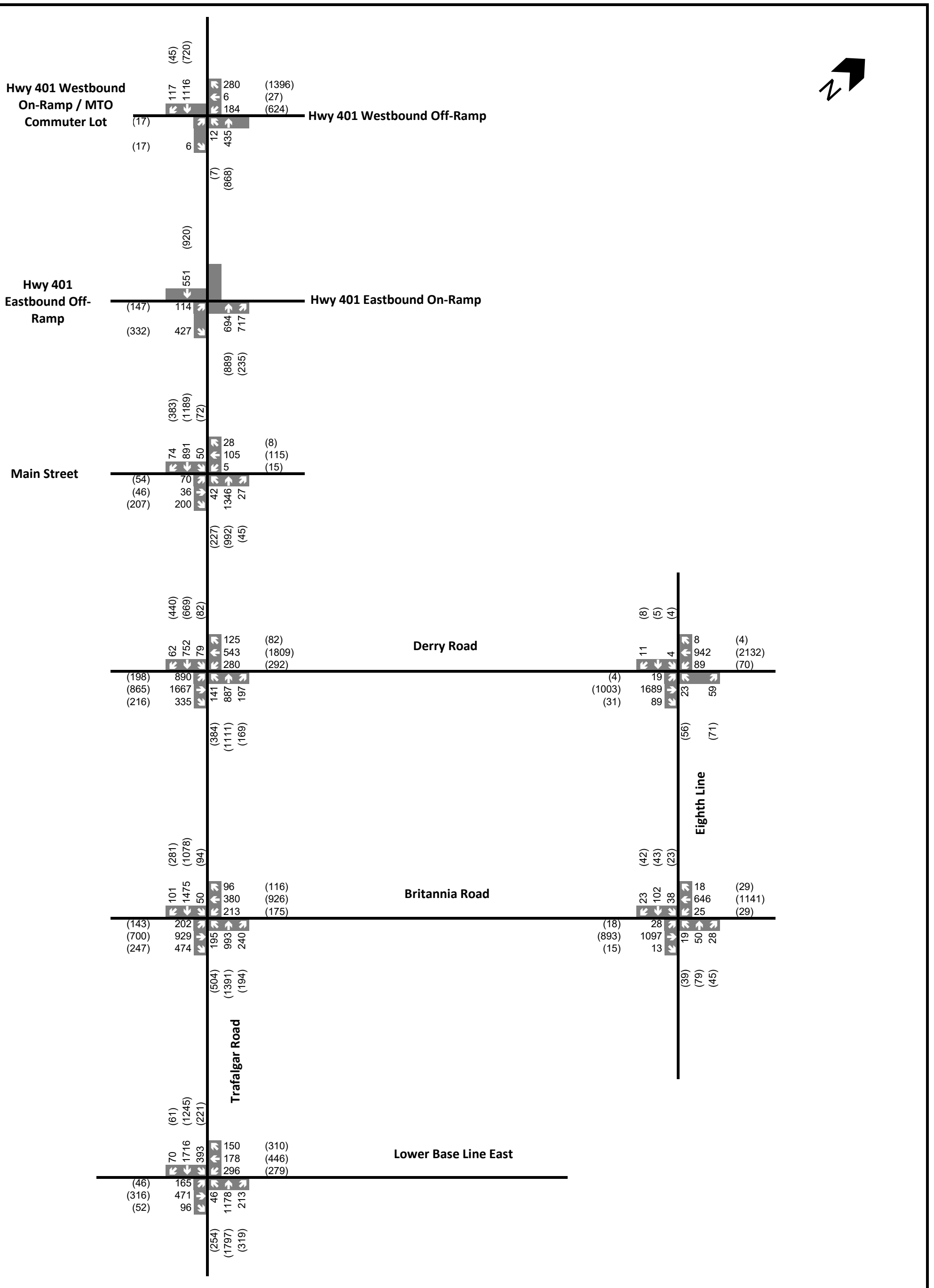


Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 3-1

2031 Future Background Traffic Volumes
External Intersections



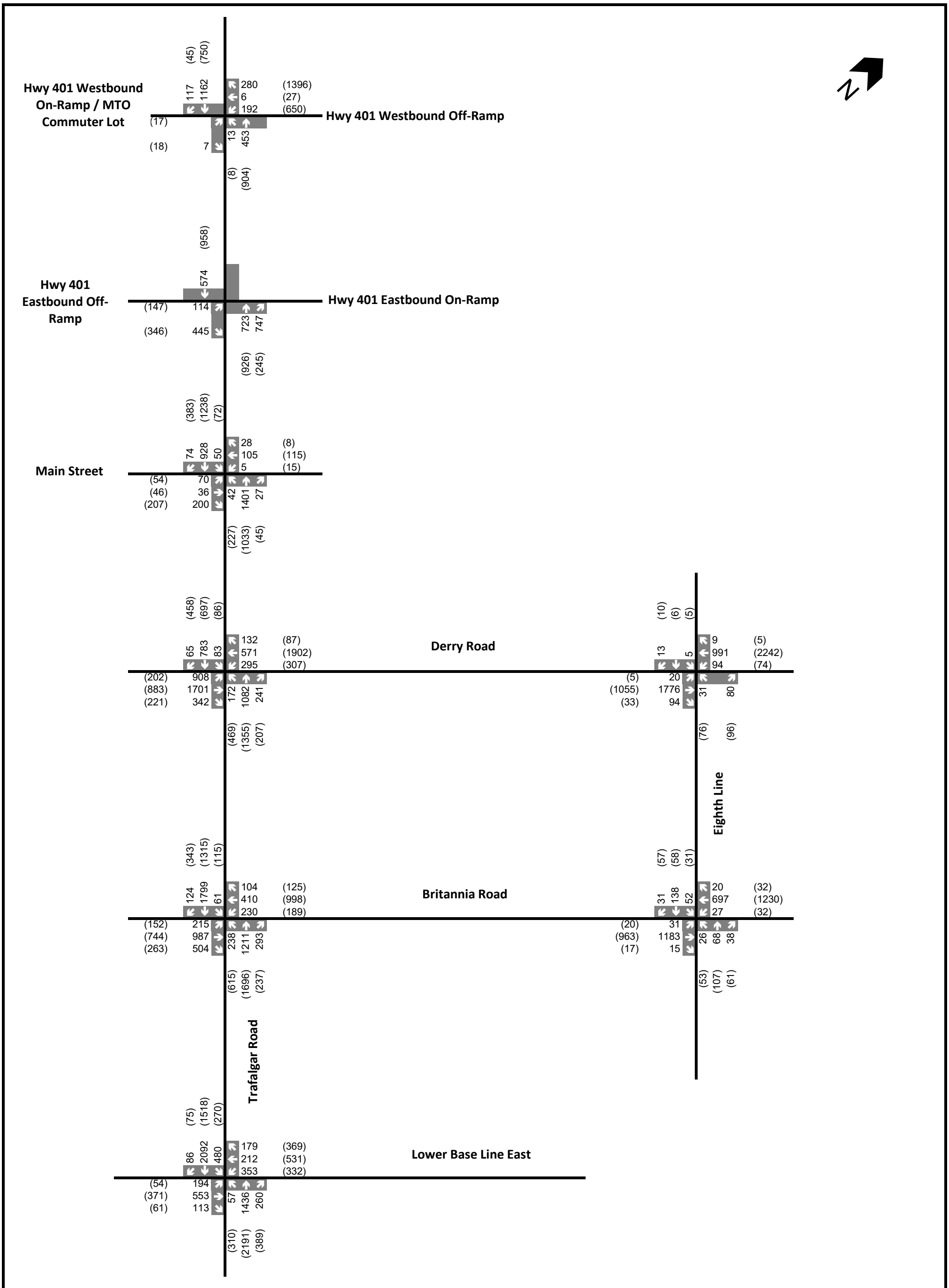
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

TYLin

Figure 3-2

2041 Future Background Traffic Volumes
External Intersections

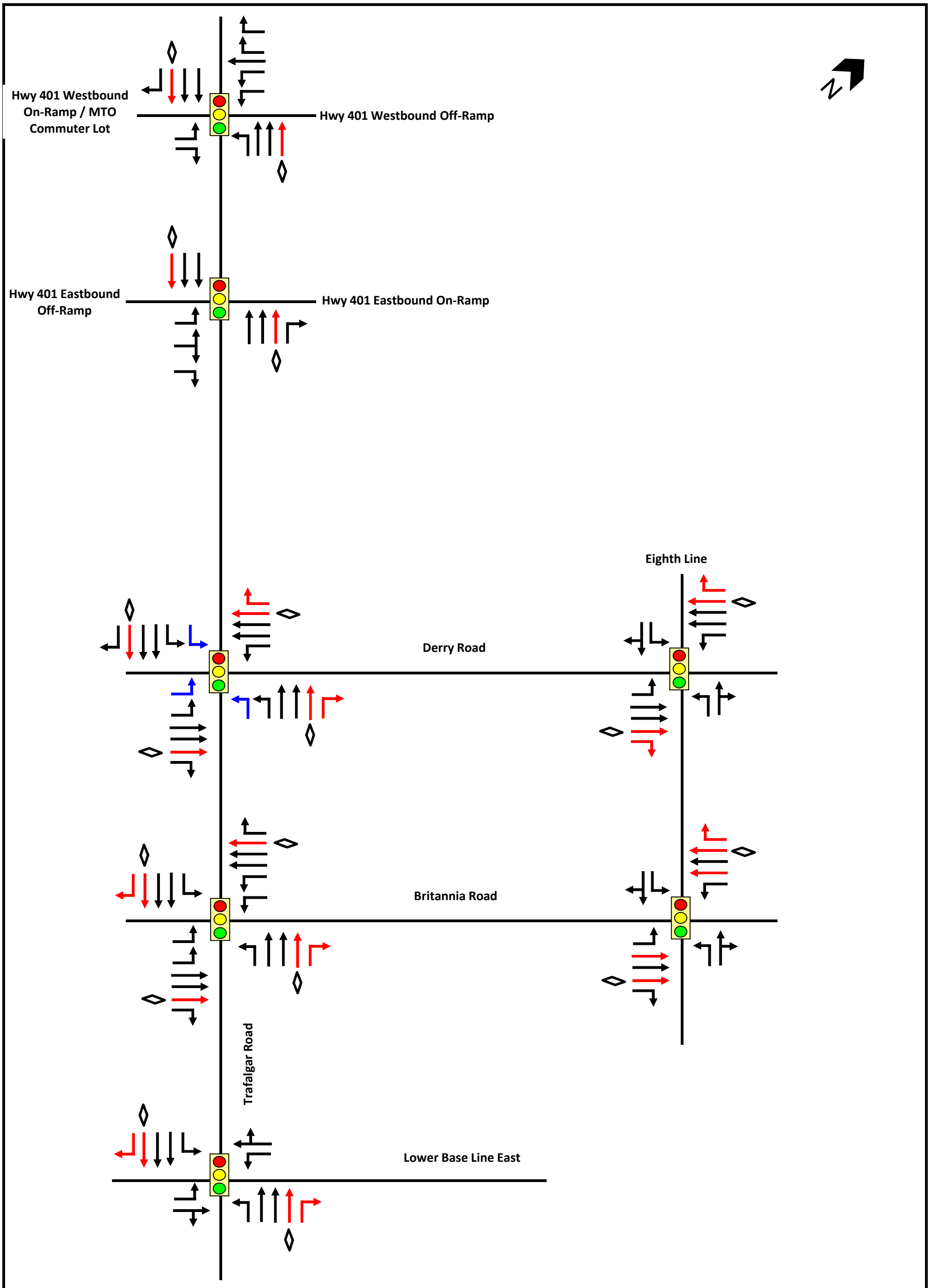


Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 3-3

2051 Future Background Traffic Volumes
External Intersections



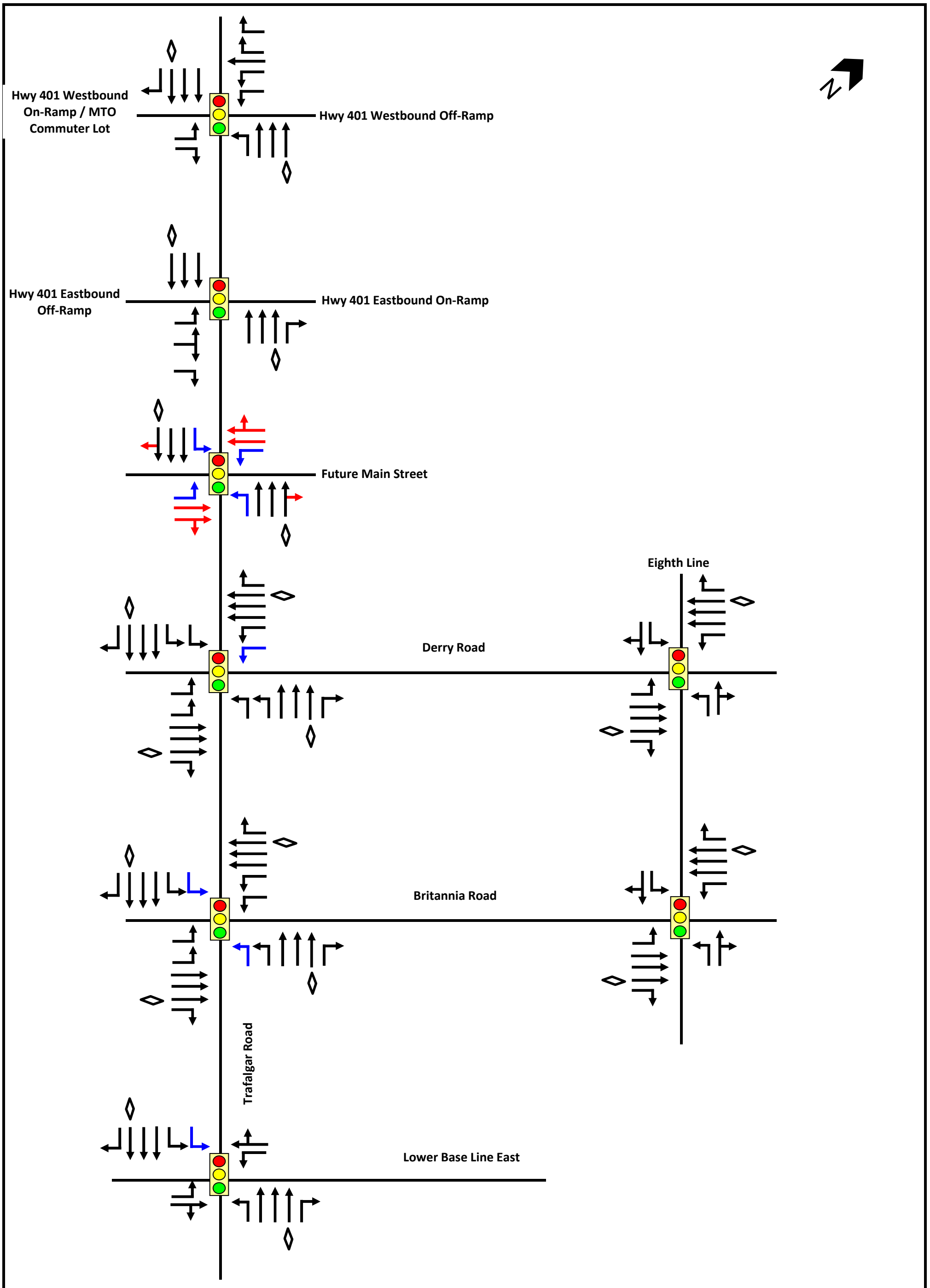
Legend

Signalized Intersection | Unsignalized Intersection | Recommended Improvement | Planned Improvement | HOV Lane

TYLin

Figure 3-4

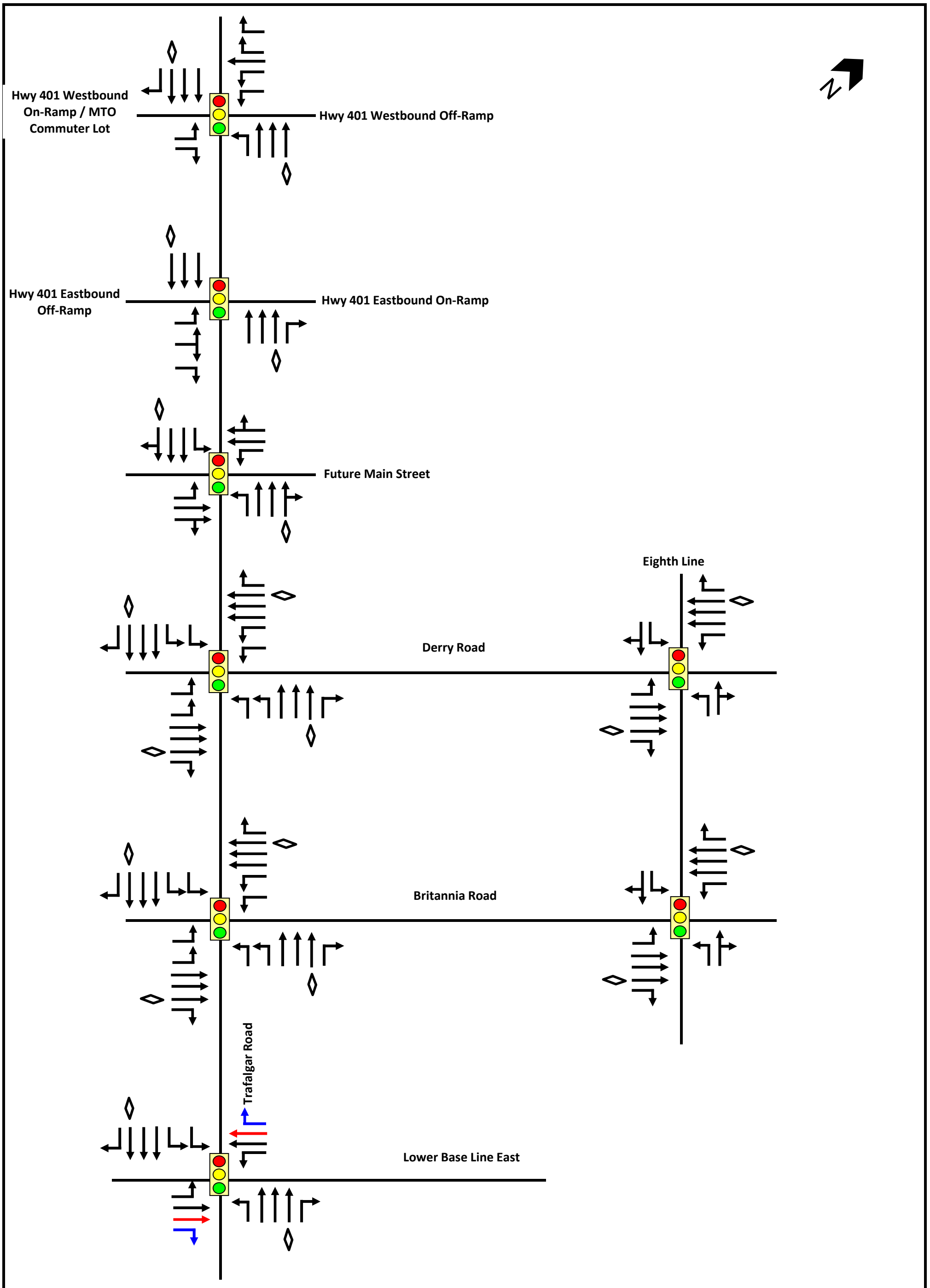
2031 Future Background Lane Configurations



TYLin

Figure 3-5

2041 Future Background Lane Configurations



Legend

Signalized Intersection | Unsignalized Intersection | Recommended Improvement | Planned Improvement | HOV Lane

TYLin

Figure 3-6

2051 Future Background Lane Configurations

3.5 Intersection Capacity and Queuing Analysis

The following tables summarize the Synchro/HCM capacity and queuing results for the study intersections during the weekday a.m. and p.m. peak hours under future background conditions for the 2031, 2041 and 2051 horizons. Detailed Synchro reports are attached in **Appendix D**.

Road and intersection improvements adopted in the future background condition are recommended to moderate overall background traffic volumes within the study area. These adjustments are intended to represent general network optimization measures and do not pertain to, nor are they triggered by, Agerton-generated trips.

3.5.1 2031 Future Background

Additional adjustments were made to the signal timing plans under future bpackground conditions in order to accommodate the addition of background traffic. When possible, the existing cycle lengths were maintained. These modifications are summarized in **Table 3-2**. HOV/Bus lanes are to be implemented on Trafalgar Road, Britannia Road, and Derry Road under future background and future total conditions upon widening of Trafalgar Road and Derry Road to three lanes in each direction. Accordingly, a lane utilization factor of 0.80 was applied to the through movements on these roads in the Synchro model to simulate the effects of an HOV lane.

Table 3-2 2031 Future Background Signal Timing Assumptions and Modifications

Intersection	A.M. Peak Hour	P.M. Peak Hour
All	It is noted that several intersections have additional lanes added under future conditions. Therefore, additional phases have been added to the signal timing plans accordingly.	
Trafalgar Road & Derry Road	Increased cycle length to 140 seconds.	
Derry Road & Eighth Line	This intersection is unsignalized under existing conditions. However, it is assumed that this intersection will be signalized with the proposed widening of Derry Road to 6 lanes.	
	Assumed a 140-second cycle length to match that of Trafalgar Road & Derry Road.	
Trafalgar Road & Britannia Road	Increased cycle length to 140 seconds.	
Britannia Road & Eighth Line	Increased cycle length to 140 seconds.	
Trafalgar Road & E Lower Base Line	Increased cycle length to 140 seconds.	
Eighth Line & E Lower Base Line	Converted to signalized intersection with a cycle length of 140 seconds.	

The capacity results for study intersections during the weekday a.m. and p.m. peak hours under 2031 future background conditions are summarized in **Table 3-3**.

All study intersections were analyzed as signalized intersections under 2031 future background traffic conditions. Due to the widening of Trafalgar Road and Derry Road to three lanes in each direction, the intersections along these corridors were assumed to be signalized in 2031.

Table 3-3 2031 Future Background Capacity Analysis Summary

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	*0.77*	*48*	*D*	**0.99**	*57*	*E*
	EBL	0.84	76	E	0.80	**124**	**F**
	EBT	0.77	33	C	0.55	31	C
	EBR	0.26	28	C	0.11	27	C
	WBL	0.79	53	D	0.70	36	D
	WBT	0.39	39	D	**1.00**	61	E
	WBR	0.07	41	D	0.04	**170**	**F**
	NBL	0.65	**92**	**F**	**1.09**	**111**	**F**
	NBT	0.69	48	D	0.60	35	D
	NBR	0.12	**81**	**F**	0.10	**92**	**F**
	SBL	0.41	65	E	0.43	65	E
	SBT	0.65	44	D	0.45	32	C
	SBR	0.07	36	D	**0.99**	**93**	**F**
Eighth Line & Derry Road	*Overall*	*0.42*	*10*	*A*	*0.50*	*8*	*A*
	EBL	0.04	2	A	0.03	5	A
	EBT	0.44	12	B	0.25	11	B
	EBR	0.05	6	A	0.02	39	D
	WBL	0.30	4	A	0.13	2	A
	WBT	0.22	2	A	0.49	3	A
	WBR	0.00	1	A	0.00	2	A
	NBL	0.23	53	D	0.48	40	D
	NBTR	0.03	63	E	0.03	62	E
	SBL	0.04	63	E	0.03	62	E
	SBTR	0.01	62	E	0.04	62	E
Trafalgar Road & Britannia Road	*Overall*	*0.71*	*50*	*D*	**0.89**	*50*	*D*
	EBL	0.51	62	E	0.44	63	E
	EBT	0.67	50	D	0.51	47	D
	EBR	0.69	54	D	0.12	43	D
	WBL	0.72	65	E	0.55	61	E
	WBT	0.34	44	D	0.77	48	D
	WBR	0.05	**441**	**F**	0.06	59	E
	NBL	0.70	64	E	**0.96**	63	E
	NBT	0.41	30	C	0.59	50	D
	NBR	0.14	**80**	**F**	0.12	**104**	**F**

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	SBL	0.17	12	B	0.44	41	D
	SBT	0.71	32	C	0.74	39	D
	SBR	0.06	40	D	0.24	30	C
Eighth Line & Britannia Road	*Overall*	*0.32*	*21*	*C*	*0.33*	*12*	*B*
	EBL	0.04	16	B	0.04	4	A
	EBT	0.29	22	C	0.22	3	A
	EBR	0.01	5	A	0.01	5	A
	WBL	0.07	9	A	0.06	7	A
	WBT	0.19	10	A	0.31	9	A
	WBR	0.01	9	A	0.01	7	A
	NBL	0.14	62	E	0.28	62	E
	NBTR	0.24	64	E	0.41	63	E
	SBL	0.14	39	D	0.10	52	D
	SBTR	0.27	40	D	0.14	53	D
Trafalgar Road & Lower Base Line	*Overall*	**0.98**	*50*	*D*	*0.93*	*52*	*D*
	EBL	0.41	43	D	0.27	40	D
	EBTR	**1.01**	**104**	**F**	0.48	45	D
	WBL	**0.96**	**86**	**F**	0.53	31	C
	WBTR	0.54	48	D	**0.94**	69	E
	NBL	0.37	26	C	0.91	66	E
	NBT	0.67	38	D	**0.93**	48	D
	NBR	0.15	28	C	0.28	27	C
	SBL	**0.95**	68	E	**0.97**	**107**	**F**
	SBT	0.71	41	D	0.65	50	D
	SBR	0.04	15	B	0.04	24	C
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.37*	*20*	*B*	*0.79*	*38*	*D*
	EBL	0.00	0	0	0.31	65	E
	EBR	0.00	66	E	0.01	61	E
	WBL	0.59	62	E	0.34	19	B
	WBT	0.04	57	E	0.03	16	B
	WBR	0.10	57	E	0.84	33	C
	NBL	0.04	5	A	0.06	38	D
	NBT	0.13	6	A	0.70	48	D
	SBT	0.36	9	A	0.68	52	D
	SBR	0.07	7	A	0.03	41	D
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.24*	*13*	*B*	*0.32*	*11*	*B*
	EBL	0.33	32	C	0.46	32	C
	EBR	0.14	31	C	0.32	32	C
	NBT	0.22	5	A	0.28	5	A
	SBT	0.17	5	A	0.29	5	A

Under 2031 future background conditions, all study area intersections are predicted to operate below capacity and acceptable delays during both weekday a.m. and p.m. peak hours. Although some individual movements experience LOS F, most have corresponding v/c ratios of less than 1.0, indicating some reserve capacity remains.

At the intersection of Trafalgar Road and Derry Road under the p.m. peak hour, the westbound through and northbound left movements are expected to operate above capacity with v/c ratios of 1.00 and 1.09, respectively. The southbound right-turn movement is almost at capacity with a v/c ratio of 0.99. Additionally, at the intersection of Trafalgar Road and Lower Base Line the eastbound through/right-turn movement under the a.m. peak hour is also expected to operate beyond capacity with a v/c ratio of 1.01. Other movements at the Trafalgar Road and Lower Base Line intersection experience capacity constraint during both the a.m. and p.m. peak hour. The intersection will operate with overall v/c ratios of 0.98 and 0.93 during a.m. and p.m. peak hours respectively.

As noted previously, Lower Base Line is planned to be widened to two travel lanes per direction. This widening however, is not scheduled to occur until the 2051 design horizon. The operational summary provided in **Table 3-3** for the intersection of Trafalgar Road and Lower Base Line provides support for the potential acceleration of such a widening project to better accommodate future demands of future background traffic volumes.

3.5.1.1 2031 Future Background Queues

The 2031 future background traffic conditions queueing results are provided in **Appendix D**. Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 3-4**.

Table 3-4 2031 Future Background Queueing Analysis: Critical Movements

Intersection	Movement	Proposed Storage (m)	Weekday A.M. Peak Hour		Weekday P.M. Peak Hour	
			50th Percentile Queue	95th Percentile Queue	50th Percentile Queue	95th Percentile Queue
Trafalgar Road & Derry Road	SBR	85	-	**-**	152	**252**
Trafalgar Road & Britannia Road	EBR	85	62	**90**	-	-
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-Ramp	WBR	80	-	-	**157**	**248**

Under the 2031 future background conditions, select movements are expected to queue beyond the proposed storage length. The southbound right movement at the intersection of Trafalgar Road and Derry Road and the westbound right movement at the intersection of Trafalgar Road and Highway

401 westbound on- and off-ramp were also previously identified under existing conditions to exceed the existing storage, demonstrating that it is an existing issue.

3.5.2 2041 Future Background

The previous signal modifications made under the 2031 future background conditions were carrier over and applied to the 2041 future background conditions with optimized splits to address the increased traffic demand on the regional road network.

In addition to the signal optimizations made under the 2041 future background conditions, dual southbound left-turn lanes were added at the intersection of Trafalgar Road and Lower Base Line due to the capacity constraints experienced under the a.m. peak hour and eastbound and westbound right-turn lanes were included at the intersection of Trafalgar Road and Lower Base Line to address the increased traffic demand on the regional road network.

The capacity results for study intersections during the weekday a.m. and p.m. peak hours under the 2041 future background traffic conditions are summarized in **Table 3-5**.

Table 3-5 2041 Future Background Capacity Analysis Summary

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	**0.86**	*52*	*D*	**0.93**	*54*	*D*
	EBL	**0.92**	71	E	0.69	**81**	**F**
	EBT	**0.91**	45	D	0.57	35	D
	EBR	0.38	43	D	0.16	23	C
	WBL	0.74	72	E	0.63	57	E
	WBT	0.53	49	D	**1.03**	64	E
	WBR	0.09	62	E	0.05	38	D
	NBL	0.83	**111**	**F**	**1.31**	**205**	**F**
	NBT	0.71	39	D	0.72	29	C
	NBR	0.13	62	E	0.12	58	E
	SBL	0.49	61	E	0.45	78	E
	SBT	0.60	41	D	0.48	27	C
	SBR	0.05	35	C	0.66	26	C
Eighth Line & Derry Road	*Overall*	*0.52*	*14*	*B*	*0.60*	*12*	*B*
	EBL	0.09	5	A	0.06	11	B
	EBT	0.57	16	B	0.31	17	B
	EBR	0.06	13	B	0.02	6	A
	WBL	0.44	11	B	0.19	4	A
	WBT	0.29	5	A	0.60	7	A
	WBR	0.00	3	A	0.00	3	A
	NBL	0.17	52	D	0.46	41	D
	NBTR	0.04	60	E	0.04	59	E

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	SBL	0.07	62	E	0.03	53	D
	SBTR	0.01	63	E	0.03	53	D
Trafalgar Road & Britannia Road	*Overall*	*0.82*	*51*	*D*	*0.75*	*43.5*	*D*
	EBL	0.57	62	E	0.52	63	E
	EBT	0.72	47	D	0.62	48	D
	EBR	0.89	66	E	0.16	41	D
	WBL	0.73	62	E	0.57	57	E
	WBT	0.32	43	D	0.82	47	D
	WBR	0.06	**229**	**F**	0.08	48	D
	NBL	0.85	76	E	0.89	**59**	**E**
	NBT	0.50	39	D	0.65	43	D
	NBR	0.15	**109**	**F**	0.14	76	E
	SBL	0.38	56	E	0.50	**86**	**F**
	SBT	0.79	33	C	0.66	25	C
	SBR	0.07	40	D	0.25	19	B
Eighth Line & Britannia Road	*Overall*	*0.38*	*26*	*C*	*0.39*	*13*	*B*
	EBL	0.06	19	B	0.07	6	A
	EBT	0.35	29	C	0.27	5	A
	EBR	0.01	6	A	0.01	5	A
	WBL	0.10	11	B	0.08	8	A
	WBT	0.23	11	B	0.37	10	A
	WBR	0.01	9	A	0.02	7	A
	NBL	0.15	72	E	0.25	58	E
	NBTR	0.33	78	E	0.52	61	E
	SBL	0.17	44	D	0.13	49	D
	SBTR	0.32	46	D	0.16	52	D
Trafalgar Road & Lower Base Line	*Overall*	**1.01**	*67*	*E*	***1.05***	*76*	*E*
	EBL	0.58	47	D	0.40	40	D
	EBTR	**1.06**	**104**	**F**	0.66	46	D
	WBL	**1.04**	**105**	**F**	0.72	48	D
	WBTR	0.40	36	D	**1.05**	**101**	**F**
	NBL	0.94	**157**	**F**	0.95	**85**	**F**
	NBT	0.82	48	D	**1.05**	77	E
	NBR	0.19	33	C	0.33	31	C
	SBL	**1.08**	**118**	**F**	**1.04**	**121**	**F**
	SBT	**0.87**	58	E	0.87	80	E
	SBR	0.06	59	E	0.04	32	C
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.41*	*20*	*B*	*0.83*	*40*	*D*
	EBL	0.00	0	0	0.30	65	E
	EBR	0.00	66	E	0.01	61	E

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	WBL	0.65	63	E	0.36	20	C
	WBT	0.03	55	E	0.03	17	B
	WBR	0.11	56	E	0.88	36	D
	NBL	0.04	6	A	0.06	37	D
	NBT	0.15	6	A	0.73	48	D
	SBT	0.39	10	B	0.70	51	D
	SBR	0.09	8	A	0.03	40	D
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.26*	*13*	*B*	*0.35*	*11*	*B*
	EBL	0.37	32	C	0.50	32	C
	EBR	0.16	31	C	0.38	32	C
	NBT	0.24	5	A	0.31	6	A
	SBT	0.20	5	A	0.31	6	A
Trafalgar Road & Main Street	*Overall*	*0.52*	*26*	*C*	*0.75*	*29*	*C*
	EBL	0.90	**121**	**F**	0.80	**99**	**F**
	EBTR	0.24	53	D	0.27	53	D
	WBL	0.45	57	E	0.21	53	D
	WBTR	0.66	59	E	0.74	62	E
	NBL	0.12	8	A	0.73	48	D
	NBTR	0.45	18	B	0.34	15	B
	SBL	0.15	5	A	0.16	11	B
	SBTR	0.31	7	A	0.57	20	C

Under 2041 future background conditions, overall the Trafalgar Road and Lower Base Line intersection operates beyond capacity during both the a.m. and p.m. peak hours. Other external intersections however, are projected to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of the critical movements that were identified under 2031 future background conditions.

With the addition of more background traffic relative to 2031, the intersection of Trafalgar Road and Lower Base Line is projected to deteriorate, with the westbound left, westbound through, northbound through, and southbound left-turn movements projected to operate with v/c ratios over 1.0 during one or both peak hours. As noted previously, these results indicate that the acceleration of the planned Lower Base Line widening may be required to accommodate projected background traffic growth.

3.5.2.1 2041 Future Background Queues

The 2041 future background traffic conditions queueing results are provided in **Appendix D**. Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 3-6**.

Table 3-6 2041 Future Background Queueing Analysis: Critical Movements

Intersection	Movement	Proposed Storage (m)	Weekday A.M. Peak Hour		Weekday P.M. Peak Hour	
			50th Percentile Queue	95th Percentile Queue	50th Percentile Queue	95th Percentile Queue
Trafalgar Road & Derry Road	EBL	130	**140**	**137**	-	**-**
Trafalgar Road & Britannia Road	EBR	85	**104**	**167**	-	-
Trafalgar Road & Lower Base Line	EBL	45	42	**69**	-	-
	WBL	110	76	**135**	-	-
	NBL	100	-	**-**	53	**106**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-Ramp	WBR	80	-	-	**172**	**264**

Under the 2041 future background conditions, select movements are expected to queue beyond the proposed storage length similar to the critical movements identified under 2031 future background conditions. At the intersection of Trafalgar Road and Derry Road, the eastbound left movement is projected to queue beyond the proposed storage but is expected to be contained by the taper distance and cleared within a single signal cycle, which is deemed acceptable. At the intersection of Trafalgar Road and Lower Base Line, the 95th percentile queues for the eastbound left and westbound left are projected to queue beyond the proposed storage length during the a.m. peak hour. Under the p.m. peak hour, the 95th percentile queue for the westbound right movement is also projected to queue beyond the proposed queue. These queues are expected to be partially contained by the taper distance, cleared within a single cycle, and are therefore considered acceptable.

3.5.3 2051 Future Background

The previous signal modifications made under the 2041 future background conditions were carried over and applied to the 2051 future background conditions with optimized splits. **Table 3-7** summarizes capacity results under 2051 future background conditions.

Table 3-7 2051 Future Background Capacity Analysis Summary

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	**0.92**	*48*	*D*	**1.01**	*58*	*E*
	EBL	**0.92**	70	E	**1.00**	**159**	**F**
	EBT	**0.90**	36	D	0.60	26	C
	EBR	0.39	32	C	0.14	19	B
	WBL	0.81	79	E	0.70	62	E
	WBT	0.56	46	D	**1.06**	77	E
	WBR	0.11	47	D	0.05	42	D
	NBL	0.81	**106**	**F**	**1.15**	**138**	**F**
	NBT	**0.89**	44	D	**0.84**	39	D
	NBR	0.23	36	D	0.19	45	D
	SBL	0.51	61	E	0.47	78	E
	SBT	0.67	43	D	0.54	29	C
	SBR	0.05	37	D	0.73	34	C
Eighth Line & Derry Road	*Overall*	*0.56*	*17*	*B*	*0.65*	*15*	*B*
	EBL	0.10	8	A	0.09	19	B
	EBT	0.61	22	C	0.33	24	C
	EBR	0.06	16	B	0.02	7	A
	WBL	0.49	16	B	0.21	5	A
	WBT	0.31	5	A	0.64	8	A
	WBR	0.01	4	A	0.00	4	A
	NBL	0.19	41	D	0.56	43	D
	NBTR	0.05	58	E	0.06	58	E
	SBL	0.07	60	E	0.04	51	D
	SBTR	0.01	61	E	0.04	51	D
Trafalgar Road & Britannia Road	*Overall*	**0.95**	*53*	*D*	**0.86**	*45*	*D*
	EBL	0.67	67	E	0.87	**101**	**F**
	EBT	0.80	51	D	0.66	49	D
	EBR	**1.00**	**95**	**F**	0.17	41	D
	WBL	0.84	78	E	0.83	**105**	**F**
	WBT	0.36	33	C	0.85	45	D
	WBR	0.06	32	C	0.08	15	B
	NBL	**0.98**	**106**	**F**	0.91	61	E
	NBT	0.59	37	D	0.76	40	D
	NBR	0.22	74	E	0.19	52	D
	SBL	0.46	64	E	0.57	**83**	**F**
	SBT	**0.94**	44	D	0.83	33	C
	SBR	0.09	26	C	0.46	19	B
Eighth Line & Britannia Road	*Overall*	*0.44*	*11*	*B*	*0.45*	*13*	*B*
	EBL	0.07	3	A	0.08	1	A

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	EBT	0.38	3	A	0.30	1	A
	EBR	0.01	6	A	0.01	6	A
	WBL	0.13	12	B	0.10	10	A
	WBT	0.25	12	B	0.42	12	B
	WBR	0.01	10	A	0.02	9	A
	NBL	0.21	34	C	0.31	45	D
	NBTR	0.47	33	C	0.66	51	D
	SBL	0.23	36	D	0.19	48	D
	SBTR	0.43	41	D	0.25	50	D
Trafalgar Road & Lower Base Line	*Overall*	**1.17**	*64*	*E*	**0.98**	*52*	*D*
	EBL	**1.16**	**177**	**F**	0.30	50	D
	EBT	**0.98**	**90**	**F**	0.71	62	E
	EBR	0.15	51	D	0.04	51	D
	WBL	**1.17**	**156**	**F**	**0.98**	**98**	**F**
	WBT	0.18	41	D	0.56	58	E
	WBR	0.12	**102**	**F**	0.65	73	E
	NBL	**1.16**	**219**	**F**	0.91	70	E
	NBT	0.75	35	C	**0.94**	39	D
	NBR	0.21	24	C	0.33	20	B
	SBL	**1.17**	**145**	**F**	0.91	66	E
	SBT	0.84	35	C	0.83	53	D
	SBR	0.07	29	C	0.05	24	C
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.42*	*20*	*B*	*0.84*	*40*	*D*
	EBL	0.00	0	0	0.30	65	E
	EBR	0.00	66	E	0.01	61	E
	WBL	0.66	63	E	0.38	21	C
	WBT	0.03	55	D	0.03	17	B
	WBR	0.11	56	E	0.90	38	D
	NBL	0.05	6	A	0.08	36	D
	NBT	0.16	6	A	0.74	48	D
	SBT	0.40	10	B	0.71	51	D
	SBR	0.09	8	A	0.03	40	D
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.27*	*13*	*B*	*0.36*	*11*	*B*
	EBL	0.37	32	C	0.51	32	C
	EBR	0.17	31	C	0.44	32	C
	NBT	0.25	5	A	0.32	6	A
	SBT	0.20	5	A	0.33	6	A

Under 2051 future background conditions, most external intersections are predicted to operate with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak

hours, with the exception of the critical movements identified under the 2041 future background conditions. Additionally, at the intersection of Trafalgar Road and Britannia Road, the eastbound right movement is expected to operate with a v/c ratio of 1.00 during the a.m. peak hour. At the intersection of Trafalgar Road and Lower Base Line, all dedicated left-turn movements are expected to operate beyond the theoretical capacity, with v/c ratios exceeding 1.0 during the a.m. peak hour. It should be noted that these levels of delay are expected despite the assumption that Lower Base Line would be widened before the 2051 design horizon. As such, consideration for additional geometric modifications may be required to achieve acceptable operations for these movements, such as dual left-turn lanes.

3.5.3.1 2051 Future Background Queues

The 2051 future background traffic conditions queueing results are provided in **Appendix D**. Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 3-8**.

Table 3-8 2051 Future Background Queueing Analysis: Critical Movements

Intersection	Movement	Proposed Storage (m)	Weekday A.M. Peak Hour		Weekday P.M. Peak Hour	
			50th Percentile Queue	95th Percentile Queue	50th Percentile Queue	95th Percentile Queue
Trafalgar Road & Derry Road	NBL	110	-	-	80	**114**
	SBR	85	-	-	**86**	38
Trafalgar Road & Britannia Road	EBR	85	**125**	**201**	-	-
Trafalgar Road & Lower Base Line	EBL	90	69	**120**	-	-
	WBL	120	105	**169**	95	**135**
	WBR	70	-	-	83	**117**
	NBL	100	-	-	68	**116**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-Ramp	WBR	80	-	-	**176**	**270**

Under the 2051 future background conditions, select movements are expected to queue beyond the proposed storage length similar to the critical movements identified under 2031 and 2041 future background conditions. At the intersection of Trafalgar Road and Derry Road, the 95th percentile queue at northbound left movement is projected to queue beyond the proposed storage but is expected to be contained by the taper distance and cleared within a single signal cycle, which is deemed acceptable.

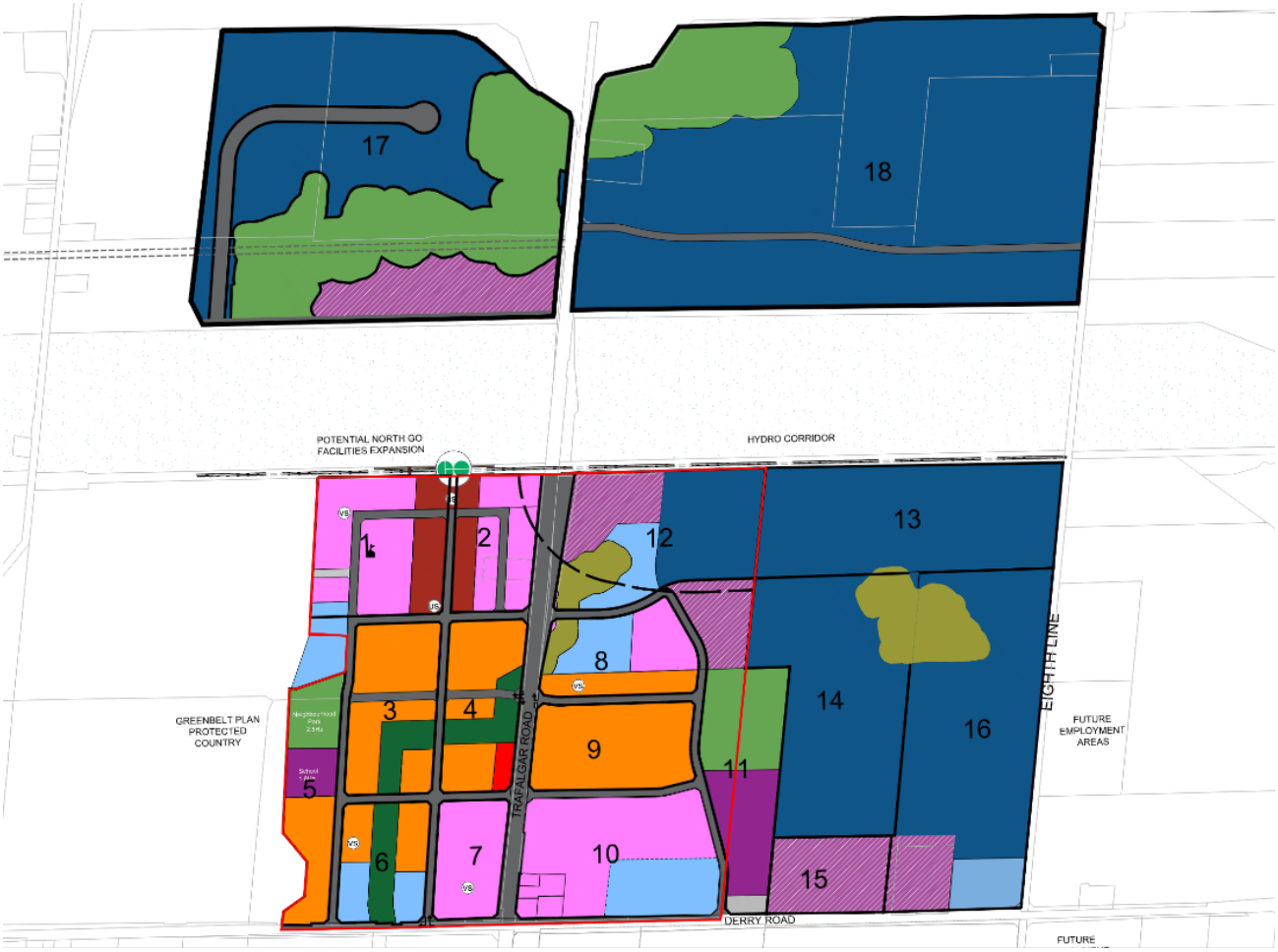
4 AGERTON SECONDARY PLAN SITE TRAFFIC

4.1 Traffic Analysis Zones

The Agerton Secondary Plan Area was divided into 18 Traffic Analysis Zones (TAZs) for the purposes of trip generation and assignment. The TAZ boundaries are generally defined by the collector road network and NHS features, conforming to the shape of future development blocks when possible.

The proposed land uses and site statistics for each TAZ were used to inform the site trip generation process. The resulting trips were then assigned to the collector road and broader transportation network based on each TAZ's location within the Agerton Secondary Plan Area. The locations and boundaries of each TAZ are illustrated in **Figure 4-1**.

Figure 4-1 Traffic Analysis Zones



4.2 Site Statistics

TYLin adopted a set of secondary plan land uses and estimated site statistics, provided by SGL Planning & Design Inc. (SGL), for the purposes of trip generation estimates. The Agerton Landowners Group adopted a preliminary phased build-out schedule for residential and employment land uses within the Agerton Secondary Plan, aligning with the Region's estimates. The general site statistics adopted, per the full build-out 2051 scenario, are as follows:

- 7,132 Residential Units
- Commercial and Mixed Use G.F.A. of 2,233,000 ft^2
- Employment G.F.A. of 20,624,000 ft^2
- 1 Community Centre and Library with a combined G.F.A. of 142,000 ft^2
- 1 District Park
- 1 Elementary School (750 Students)

It is noted that one school site has been included in the analysis. Any additional schools introduced within the Secondary Plan are expected to have minimal impact on regional intersections, as the majority of associated trips would be internal in nature and dispersed throughout the local network.

The Agerton Landowners Group adopted a preliminary phased build-out schedule for residential and employment land uses within the Agerton Secondary Plan, aligning with the Region's estimates. These phasing targets, tabulated in **Table 4-1**, have been incorporated into the trip generation and traffic analysis to reflect the anticipated timing and intensity of development.

Table 4-1 Agerton Development Phasing

Horizon Year	Residential Phasing	Employment Phasing
2031	50%	30%
2041	90%	55%
2051	100%	100%

Table 4-2 summarizes the phased site statistics for the Agerton Secondary Plan and identifies Institute of Transportation Engineers (ITE) Land Use Codes (LUCs) applied to each land use for the purposes of trip generation calculations.

Table 4-2 Agerton Site Statistics for Trip Generation

Land Use Type	ITE Land Use	LUC	Unit	2031 Parameters	2041 Parameters[1]	2051 Parameters[1]
Townhouses	Multifamily Housing (Low-Rise)	220	units	471	842	937
Stacks	Multifamily Housing (Mid-Rise)	221	units	259	462	514
Apartments	Multifamily Housing (High-Rise)	222	units	2,843	5,114	5,681
Total Residential Units			**units**	**3,573**	**6,418**	**7,132**
Mixed Use Transit + Neighbourhood Centre Mixed Use	Shopping Center	820	sq. ft GFA	265,000	484,000	882,000
	General Office Building	710	sq. ft GFA	110,000	200,000	364,000
Mixed Use Commercial Corridor	Business Park	770	sq. ft GFA	296,000	542,000	987,000
Employment	Industrial Park	130	sq. ft GFA	6,186,000	11,345,000	20,624,000
Community Centre	Community Centre + Library	CUSTOM (495 + 590)	sq. ft GFA	142,000	142,000	142,000
District Park	Public Park	411	acres	15	15	15
Elementary School	Elementary School	520	students	750	750	750

1 – The site statistics are cumulative in each horizon years, which align with the percentage shown in Table 4-1

The elementary school student population of 750 students was adopted from TYLin's Trafalgar Tertiary Plan RNA (November 2025) report. The student populations were originally provided to TYLin by SGL based on SGL's direct communications with local school boards and their current enrollment and planning practices in the Trafalgar area.

The Community Centre planned within the Agerton Secondary Plan was assumed to have a total of 142,000 square feet Gross Floor Area (sq.ft. G.F.A.), inclusive of 12,000 sq.ft G.F.A. for a branch of the Milton Public Library. The community centre G.F.A. square footage assumptions are based on preliminary information provided to TYLin by Town Staff during the early planning stages of the Trafalgar Tertiary Plan RNA report.

Detailed descriptions of each ITE land use type adopted in the analysis, as defined in the Trip Generation Manual, 12th Edition, are provided in **Appendix E**.

4.3 Dense Multi-Use Urban Setting

Based on the Town's vision for multi-use urban development within the Agerton Secondary Plan area (particularly with the implementation of the Trafalgar GO Station/MTSA), the Agerton Secondary Plan exhibits characteristics of a Dense Multi-Use Urban context, as defined in ITE's

Trip Generation 12th Edition. Key attributes of ITE's definition of a Dense Multi-Use Urban location are as follows, with a detailed definition provided in **Appendix E**.

- Diverse, complementary land uses (residential, office, retail, commercial, etc.) in close proximity;
- High-density residential development within an urban area;
- A pedestrian, cycling, and transit supportive community in addition to vehicular travel;
- High transit mode share supported by frequent and convenient transit access, including regional rail, regional and local bus routes, and HOV/transit priority corridors; and
- Significant potential for short trips within the multi-use area (internal trip capture) via non-automobile travel due to walkable urban design.

The Dense Multi-Use Urban dataset was selected for the following ITE land uses to better reflect the planned urban form and multimodal environment envisioned in the Agerton Secondary Plan.

- ITE LUC 220 – Multifamily Housing (Low-Rise)
- ITE LUC 221 – Multifamily Housing (Mid-Rise)
- ITE LUC 222 – Multifamily Housing (High-Rise)
- ITE LUC 710 – General Office Building

4.4 With / Without Trafalgar GO Station Scenarios

Through consultation with Town Staff, it was determined that the traffic analysis would assess the impact of the future Trafalgar GO Station. As noted in Section 3.2, the annual background growth rates provided by the Region account for traffic associated with the future Trafalgar GO Station.

Based on the assumption that the Trafalgar GO Station will not be constructed by the 2031 study horizon, the enclosed traffic analysis assesses the impact of the Trafalgar GO Station on future total traffic for the 2041 and 2051 study horizon years. Accordingly, results for "With GO Station" and "Without GO Station" scenarios are provided for the 2041 and 2051 horizon years. The 2031 future total results align with the "Without GO Station" scenario.

For ITE LUC 220, 221, and 222, the ITE Trip Generation Manual, 12th Edition provides separate subcategories based on proximity to rail transit.

- "Not Close to Rail Transit" was applied to the Without GO scenario
- "Close to Rail Transit", defined as a walking distance of 0.5 mile (approximately 800 metres) or less from the residential site entrance to the rail transit station entrance, was applied to the With GO scenario.

Given the planned location of the Trafalgar GO Station within the Secondary Plan area, the "Close to Rail Transit" subcategory is appropriate to apply to residential land uses for the With GO scenario.

For all other land uses, trip generation rates remain consistent between scenarios.

Mode Split reductions to site trips, discussed in **Section 4.5**, were not applied to the estimated residential site trips. Given the application of ITE's dense multi-use urban location and the "close" or "not close" to rail transit subcategories for the residential uses, it was deemed that applying the Region's 28% mode split target to the residential trips would not produce conservative vehicular analysis results.

4.5 Non-Automobile Mode Split Reductions

A Base Line non-automobile mode split reduction of 28% was applied to trips generated by all ITE land use codes under the "without GO" scenario. This 28% reduction aligns directly with the methodology employed in the March 2022 Trafalgar Transportation Master Plan, which references the 2031 targets from the Region's 2011 TMP: 5% active transportation, 20% transit, and 3% other transportation demand management (TDM) measures.

The 28% mode split reduction was not applied to the residential (ITE LUC 220, 221, and 222) and office (ITE LUC 710) land uses. For these land uses, trip generation rates were derived from ITE's Dense Multi-Use Urban dataset, which inherently reflects higher transit and active transportation mode shares due to urban form, density, and proximity to multimodal infrastructure. Accordingly, additional mode split reductions were not applied beyond the dataset's Base Line assumptions as a conservative measure.

Under the "with GO" scenario, an additional 5% non-automobile mode split reduction was applied to all land use types except the aforementioned residential and office categories, along with the elementary school (ITE LUC 520). The additional 5% mode split reduction was not applied to the Elementary School as a conservative measure, as it is assumed that the majority of the school traffic will be generated locally and would not see significant reductions due to the presence of regional rail.

The 5% mode split adjustment accounts for induced transit demand associated with the implementation of the Trafalgar GO Station. The resulting cumulative 33% non-automobile mode share (28% base + 5% GO-induced) aligns with Metrolinx policy as outlined in the GO Rail Station Access report, which targets 25% transit access for stations in transit-priority areas, representing a 5% increase over the Region's 2011 TMP transit target of 20%.

4.6 Trip Generation

Trips generated by the proposed land uses within the Agerton Secondary Plan were estimated using the 12th edition of ITE's Trip Generation Manual.

In an effort to acknowledge that some land use types will produce and capture a significant number of internal trips within the Secondary Plan area, such as schools, the net trips produced by some land uses were divided between internal and external trips. The assumed splits of internal and external trips, as applicable, are identified in the trip generation summary tables.

4.6.1 2031 Horizon Year

Based on the phased site statistics detailed in **Table 4-2**, estimated site trip generation of the Agerton Secondary Plan for the "Without GO Station" scenario in 2031 is summarized in **Table 4-3**.

Table 4-3 Agerton 2031 (without GO Station) Trip Generation Summary

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
471 Units	Gross Trips	19	162	181	121	13	134
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**19**	**162**	**181**	**121**	**13**	**134**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
259 Units	Gross Trips	14	83	97	51	18	69
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**14**	**83**	**97**	**51**	**18**	**69**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
2,843 Units	Gross Trips	171	511	682	388	143	531
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**171**	**511**	**682**	**388**	**143**	**531**
Total Residential	Gross Trips	204	756	960	560	174	734
	Mode Split Reduction (0%)	0	0	0	0	0	0
3,573 Units	**Net Trips**	**204**	**756**	**960**	**560**	**174**	**734**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
265,000 sq. ft GFA	Gross Trips	144	89	233	815	848	1,663

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
	Mode Split Reduction (28%)	41	24	65	228	237	465
	Pass-by (34% PM)	0	0	0	208	208	416
	Net Trips	**103**	**65**	**168**	**379**	**403**	**782**
	Net Trips (90% Internal)	93	59	152	341	363	704
	Net Trips (10% External)	10	6	16	38	40	78
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
110,000 sq. ft GFA	Gross Trips	179	26	205	20	109	129
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**179**	**26**	**205**	**20**	**109**	**129**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	179	26	205	20	109	129
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
296,000 sq. ft GFA	Gross Trips	131	28	159	63	153	216
	Mode Split Reduction (28%)	37	8	45	18	42	60
	Net Trips	**94**	**20**	**114**	**45**	**111**	**156**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	94	20	114	45	111	156
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
6,186,000 sq. ft GFA	Gross Trips	1,249	372	1,621	468	1,206	1,674
	Mode Split Reduction (28%)	350	105	455	130	338	468
	Net Trips	**899**	**267**	**1,166**	**338**	**868**	**1,206**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	899	267	1,166	338	868	1,206
Community Centre + Library	Trip Generation Equation or Average Rate	-			-		
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (28%)	46	23	69	60	65	125
	Net Trips	**118**	**61**	**179**	**153**	**166**	**319**
	Net Trips (20% Internal)	23	13	36	31	34	65
	Net Trips (80% External)	95	48	143	122	132	254
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	2,163	852	3,015	1,635	2,613	4,248
	Mode Split Reduction	557	231	788	451	700	1,151
	Pass-by	0	0	0	208	208	416
	Net Trips	**1,606**	**621**	**2,227**	**976**	**1,705**	**2,681**
	Net Trips (Internal)	297	226	523	406	437	843
	Net Trips (External)	1,309	395	1,704	570	1,268	1,838
Total Trips	Gross Trips	2,367	1,608	3,975	2,195	2,787	4,982
	Mode Split Reduction	557	231	788	451	700	1,151
	Pass-by	0	0	0	208	208	416
	Net Trips	**1,810**	**1,377**	**3,187**	**1,536**	**1,879**	**3,415**
	Net Trips (Internal)	297	226	523	406	437	843
	Net Trips (External)	1,513	1,151	2,664	1,130	1,442	2,572

A total of 3,187 net auto trips, consisting of 1,810 inbound and 1,377 outbound trips, are predicted to be generated by the Agerton Secondary Plan area under 2031 (without GO Station) conditions during the weekday a.m. peak hour. During the weekday p.m. peak hour, 1,536 inbound and 1,879 outbound net auto site trips are predicted, totaling 3,415 trips.

4.6.2 2041 Horizon Year

Based on the phased site statistics detailed in **Table 4-2**, estimated site trip generation of the Agerton Secondary Plan for the "With GO Station" and "Without GO Station" scenarios in 2041 are summarized in **Table 4-4** and **Table 4-5**, respectively.

Table 4-4 Agerton 2041 (with GO Station) Trip Generation Summary

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
842 Units	Gross Trips	28	260	288	239	26	265
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**28**	**260**	**288**	**239**	**26**	**265**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
462 Units	Gross Trips	17	100	117	90	34	124
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**17**	**100**	**117**	**90**	**34**	**124**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
5,114 Units	Gross Trips	107	869	976	549	249	798
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**107**	**869**	**976**	**549**	**249**	**798**
Total Residential	Gross Trips	152	1,229	1,381	878	309	1,187
	Mode Split Reduction (0%)	0	0	0	0	0	0
6,418 Units	**Net Trips**	**152**	**1,229**	**1,381**	**878**	**309**	**1,187**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
484,000 sq. ft GFA	Gross Trips	263	163	426	1,210	1,263	2,473
	Mode Split Reduction (33%)	87	55	142	400	417	817
	Pass-by (34% PM)	0	0	0	286	286	572
	Net Trips	**176**	**108**	**284**	**524**	**560**	**1,084**
	Net Trips (90% Internal)	159	97	256	472	504	976
	Net Trips (10% External)	17	11	28	52	56	108
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
200,000 sq. ft GFA	Gross Trips	235	34	269	32	172	204
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**235**	**34**	**269**	**32**	**172**	**204**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	235	34	269	32	172	204
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
542,000 sq. ft GFA	Gross Trips	341	75	416	120	295	415
	Mode Split Reduction (33%)	113	25	138	40	97	137
	Net Trips	**228**	**50**	**278**	**80**	**198**	**278**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	228	50	278	80	198	278
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
11,345,000 sq. ft GFA	Gross Trips	1,804	539	2,343	700	1,801	2,501
	Mode Split Reduction (33%)	597	179	776	230	595	825
	Net Trips	**1,207**	**360**	**1,567**	**470**	**1,206**	**1,676**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	1,207	360	1,567	470	1,206	1,676
Community Centre + Library	Trip Generation Equation or Average Rate	-			-		
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (33%)	54	27	81	70	76	146
	Net Trips	**110**	**57**	**167**	**143**	**155**	**298**
	Net Trips (20% Internal)	22	12	34	29	31	60
	Net Trips (80% External)	88	45	133	114	124	238
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	3,103	1,148	4,251	2,331	3,828	6,159
	Mode Split Reduction	934	357	1,291	755	1,203	1,958

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
	Pass-by	0	0	0	286	286	572
	Net Trips	**2,169**	**791**	**2,960**	**1,290**	**2,339**	**3,629**
	Net Trips (Internal)	362	263	625	535	575	1,110
	Net Trips (External)	1,807	528	2,335	755	1,764	2,519
Total Trips	Gross Trips	3,255	2,377	5,632	3,209	4,137	7,346
	Mode Split Reduction	934	357	1,291	755	1,203	1,958
	Pass-by	0	0	0	286	286	572
	Net Trips	**2,321**	**2,020**	**4,341**	**2,168**	**2,648**	**4,816**
	Net Trips (Internal)	362	263	625	535	575	1,110
	Net Trips (External)	1,959	1,757	3,716	1,633	2,073	3,706

A total of 4,341 net auto trips, consisting of 2,321 inbound and 2,020 outbound trips, are estimated to be generated by the Agerton Secondary Plan area under 2041 (with GO Station) conditions during the weekday a.m. peak hour. During the weekday p.m. peak hour, 2,168 inbound and 2,648 outbound net auto site trips are predicted, totaling 4,816 trips.

Table 4-5 Agerton 2041 (without GO Station) Trip Generation Summary

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise) ITE LUC 220 842 Units	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
	Directional Split	10%	90%	-	90%	10%	-
	Gross Trips	27	243	270	202	22	224
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**27**	**243**	**270**	**202**	**22**	**224**
Multifamily Housing (Mid-Rise) ITE LUC 221 462 Units	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
	Directional Split	14%	86%	-	74%	26%	-
	Gross Trips	21	127	148	89	31	120
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**21**	**127**	**148**	**89**	**31**	**120**
Multifamily Housing (High-Rise) ITE LUC 222 5,114 Units	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) – 1.36		
	Directional Split	25%	75%	-	73%	27%	-
	Gross Trips	307	922	1,229	677	251	928
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**307**	**922**	**1,229**	**677**	**251**	**928**
Total Residential 6,418 Units	Gross Trips	355	1,292	1,647	968	304	1,272
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**355**	**1,292**	**1,647**	**968**	**304**	**1,272**

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
484,000 sq. ft GFA	Gross Trips	263	163	426	1,210	1,261	2,471
	Mode Split Reduction (28%)	73	45	118	338	354	692
	Pass-by (34% PM)	0	0	0	310	310	620
	Net Trips	**190**	**118**	**308**	**562**	**597**	**1,159**
	Net Trips (90% Internal)	171	107	278	507	538	1,045
	Net Trips (10% External)	19	11	30	55	59	114
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
200,000 sq. ft GFA	Gross Trips	235	34	269	32	171	203
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**235**	**34**	**269**	**32**	**171**	**203**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	235	34	269	32	171	203
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) – 29.56			T = 0.81 (X) – 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
542,000 sq. ft GFA	Gross Trips	341	75	416	120	295	415
	Mode Split Reduction (28%)	95	21	116	35	83	118
	Net Trips	**246**	**54**	**300**	**85**	**212**	**297**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	246	54	300	85	212	297
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
11,345,000 sq. ft GFA	Gross Trips	1,804	539	2,343	700	1,801	2,501
	Mode Split Reduction (28%)	505	149	654	197	503	700
	Net Trips	**1,299**	**390**	**1,689**	**503**	**1,298**	**1,801**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	1,299	390	1,689	503	1,298	1,801
Community Centre + Library	Trip Generation Equation or Average Rate	-			-		
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (28%)	46	23	69	60	65	125
	Net Trips	**118**	**61**	**179**	**153**	**166**	**319**
	Net Trips (20% Internal)	23	13	36	31	34	65

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
	Net Trips (80% External)	95	48	143	122	132	254
Public Park – District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	3,103	1,148	4,251	2,331	3,825	6,156
	Mode Split Reduction	802	309	1,111	645	1,023	1,668
	Pass-by	0	0	0	310	310	620
	Net Trips	**2,301**	**839**	**3,140**	**1,376**	**2,492**	**3,868**
	Net Trips (Internal)	375	274	649	572	612	1,184
	Net Trips (External)	1,926	565	2,491	804	1,880	2,684
Total Trips	Gross Trips	3,458	2,440	5,898	3,299	4,129	7,428
	Mode Split Reduction	802	309	1,111	645	1,023	1,668
	Pass-by	0	0	0	310	310	620
	Net Trips	**2,656**	**2,131**	**4,787**	**2,344**	**2,796**	**5,140**
	Net Trips (Internal)	375	274	649	572	612	1,184
	Net Trips (External)	2,281	1,857	4,138	1,772	2,184	3,956

A total of 4,787 net auto trips, consisting of 2,656 inbound and 2,131 outbound trips, are estimated to be generated by the Agerton Secondary Plan area under 2041 (without GO Station) conditions during the weekday a.m. peak hour. During the weekday p.m. peak hour, 2,344 inbound and 2,796 outbound net auto site trips are predicted, totaling 5,140 trips.

4.6.3 2051 Horizon Year

Based on the phased site statistics detailed in **Table 4-2**, estimated site trip generation of the Agerton Secondary Plan for the "With GO Station" and "Without GO Station" scenarios in 2051 are summarized in **Table 4-6** and **Table 4-7**, respectively.

Table 4-6 Agerton 2051 (with GO Station) Trip Generation Summary

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
937 Units	Gross Trips	32	283	315	262	29	291
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**32**	**283**	**315**	**262**	**29**	**291**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
514 Units	Gross Trips	20	108	128	102	33	135
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**20**	**108**	**128**	**102**	**33**	**135**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
5,681 Units	Gross Trips	121	957	1,078	602	273	875
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**121**	**957**	**1,078**	**602**	**273**	**875**
Total Residential	Gross Trips	173	1,348	1,521	966	335	1,301
	Mode Split Reduction (0%)	0	0	0	0	0	0
7,132 Units	**Net Trips**	**173**	**1,348**	**1,521**	**966**	**335**	**1,301**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
882,000 sq. ft GFA	Gross Trips	481	295	776	1,801	1,873	3,674
	Mode Split Reduction (33%)	158	98	256	594	618	1,212
	Pass-by (34% PM)	0	0	0	426	426	852
	Net Trips	**323**	**197**	**520**	**781**	**829**	**1,610**
	Net Trips (90% Internal)	291	178	469	703	746	1,449
	Net Trips (10% External)	32	19	51	78	83	161
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
364,000 sq. ft GFA	Gross Trips	338	50	388	55	285	340
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**338**	**50**	**388**	**55**	**285**	**340**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	338	50	388	55	285	340
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
ITE LUC 770 987,000 sq. ft GFA	Directional Split	82%	18%	-	29%	71%	-
	Gross Trips	719	159	878	226	550	776
	Mode Split Reduction (33%)	237	52	289	75	181	256
	Net Trips	**482**	**107**	**589**	**151**	**369**	**520**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	482	107	589	151	369	520
Industrial Park ITE LUC 130 20,624,000 sq. ft GFA	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
	Directional Split	77%	23%	-	28%	72%	-
	Gross Trips	2,806	836	3,642	1,116	2,869	3,985
	Mode Split Reduction (33%)	925	276	1,201	368	945	1,313
	Net Trips	**1,881**	**560**	**2,441**	**748**	**1,924**	**2,672**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	1,881	560	2,441	748	1,924	2,672
Community Centre + Library ITE LUC CUSTOM (495 + 590) 142,000 sq. ft GFA	Trip Generation Equation or Average Rate	-			-		
	Directional Split	-	-	-	-	-	-
	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (33%)	54	27	81	70	76	146
	Net Trips	**110**	**57**	**167**	**143**	**155**	**298**
	Net Trips (20% Internal)	22	12	34	29	31	60
	Net Trips (80% External)	88	45	133	114	124	238
Public Park - District Park ITE LUC 411 14.83 acres	Trip Generation Equation or Average Rate	0.05			0.15		
	Directional Split	62%	38%	-	57%	43%	-
	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School ITE LUC 520 750 Students	Trip Generation Equation or Average Rate	0.73			0.16		
	Directional Split	54%	46%	-	46%	54%	-
	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	4,804	1,677	6,481	3,467	5,874	9,341
	Mode Split Reduction	1,457	524	1,981	1,122	1,838	2,960

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
	Pass-by	0	0	0	426	426	852
	Net Trips	**3,347**	**1,153**	**4,500**	**1,919**	**3,610**	**5,529**
	Net Trips (Internal)	494	344	838	766	817	1,583
	Net Trips (External)	2,853	809	3,662	1,153	2,793	3,946
Total Trips	Gross Trips	4,977	3,025	8,002	4,433	6,209	10,642
	Mode Split Reduction	1,457	524	1,981	1,122	1,838	2,960
	Pass-by	0	0	0	426	426	852
	Net Trips	**3,520**	**2,501**	**6,021**	**2,885**	**3,945**	**6,830**
	Net Trips (Internal)	494	344	838	766	817	1,583
	Net Trips (External)	3,026	2,157	5,183	2,119	3,128	5,247

A total of 6,021 net auto trips, consisting of 3,520 inbound and 2,501 outbound trips, are estimated to be generated by the Agerton Secondary Plan area under 2051 (with GO Station) conditions during the weekday a.m. peak hour. During the weekday p.m. peak hour, 2,885 inbound and 3,945 outbound net auto site trips are predicted, totaling 6,830 trips.

Table 4-7 Agerton 2051 (without GO Station) Trip Generation Summary

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
937 Units	Gross Trips	29	263	292	223	26	249
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**29**	**263**	**292**	**223**	**26**	**249**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
514 Units	Gross Trips	22	140	162	99	35	134
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**22**	**140**	**162**	**99**	**35**	**134**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
5,681 Units	Gross Trips	341	1,022	1,363	749	278	1,027
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**341**	**1,022**	**1,363**	**749**	**278**	**1,027**
Total Residential	Gross Trips	392	1,425	1,817	1,071	339	1,410
	Mode Split Reduction (0%)	0	0	0	0	0	0
7,132 Units	**Net Trips**	**392**	**1,425**	**1,817**	**1,071**	**339**	**1,410**

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
882,000 sq. ft GFA	Gross Trips	481	295	776	1,801	1,875	3,676
	Mode Split Reduction (28%)	135	83	218	504	526	1,030
	Pass-by (34% PM)	0	0	0	454	454	908
	Net Trips	**346**	**212**	**558**	**843**	**895**	**1,738**
	Net Trips (90% Internal)	312	191	503	759	806	1,565
	Net Trips (10% External)	34	21	55	84	89	173
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
364,000 sq. ft GFA	Gross Trips	338	50	388	55	284	339
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**338**	**50**	**388**	**55**	**284**	**339**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	338	50	388	55	284	339
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
987,000 sq. ft GFA	Gross Trips	719	159	878	226	551	777
	Mode Split Reduction (28%)	202	43	245	64	155	219
	Net Trips	**517**	**116**	**633**	**162**	**396**	**558**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	517	116	633	162	396	558
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
20,624,000 sq. ft GFA	Gross Trips	2,806	836	3,642	1,116	2,869	3,985
	Mode Split Reduction (28%)	786	235	1,021	313	802	1,115
	Net Trips	**2,020**	**601**	**2,621**	**803**	**2,067**	**2,870**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	2,020	601	2,621	803	2,067	2,870
Community Centre + Library	Trip Generation Equation or Average Rate	-			-		
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (28%)	46	23	69	60	65	125
	Net Trips	**118**	**61**	**179**	**153**	**166**	**319**
	Net Trips (20% Internal)	23	13	36	31	34	65

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
	Net Trips (80% External)	95	48	143	122	132	254
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	4,804	1,677	6,481	3,467	5,876	9,343
	Mode Split Reduction	1,252	455	1,707	956	1,566	2,522
	Pass-by	0	0	0	454	454	908
	Net Trips	**3,552**	**1,222**	**4,774**	**2,057**	**3,856**	**5,913**
	Net Trips (Internal)	516	358	874	824	880	1,704
	Net Trips (External)	3,036	864	3,900	1,233	2,976	4,209
Total Trips	Gross Trips	5,196	3,102	8,298	4,538	6,215	10,753
	Mode Split Reduction	1,252	455	1,707	956	1,566	2,522
	Pass-by	0	0	0	454	454	908
	Net Trips	**3,944**	**2,647**	**6,591**	**3,128**	**4,195**	**7,323**
	Net Trips (Internal)	516	358	874	824	880	1,704
	Net Trips (External)	3,428	2,289	5,717	2,304	3,315	5,619

A total of 6,591 net auto trips, consisting of 3,944 inbound and 2,647 outbound trips, are estimated to be generated by the Agerton Secondary Plan area under 2051 (without GO Station) conditions during the weekday a.m. peak hour. During the weekday p.m. peak hour, 3,128 inbound and 4,195 outbound net auto site trips are predicted, totaling 7,323 trips.

A detailed summary of land use statistics and trip generation for the 18 TAZs can be found in **Appendix F** for each horizon year and the applicable with/without GO Station scenarios.

4.7 Trip Distribution

Due to the current rural/greenfield status of the Tertiary Plan lands, TTS data would not properly reflect the future land uses and associated travel patterns within the study area. Further, nearby future infrastructure improvements, the proposed GO Station, and other proposed developments will all contribute to changes in existing traffic patterns within the vicinity of the study area.

The 2022 Trafalgar TMP estimated the trip distribution of the Trafalgar and Agerton Secondary Plans using the Region's 2031 EMME model. The external distribution was broken down by locations in the GTA, as summarized in Table 4-7 of the 2022 Trafalgar TMP Addendum, which was then applied to the site assignment of Trafalgar and Agerton traffic to develop the Origin-Destination (O-D) matrices outlined in Appendix F of the 2022 TMP. The 2022 TMP site traffic O-D matrices were developed for two different scenarios – trip generation with and without the GO Station operating.

While TYLin received an updated version of the Region's EMME Modeling, only O-D matrices and a portion of the EMME model road network specific to the Agerton Secondary Plan was provided. The updated model from the Region also included the assumption that the GO Station was operational (thus impacting traffic patterns). Updated EMME O-D matrices for the Trafalgar area were not provided to TYLin.

To better align with the 2022 Trafalgar TMP, TYLin derived a trip distribution specific to the "With GO" and "Without GO" scenario from the Site Assignment O-D matrices in Appendix F of the 2022 TMP using the site trips bound to/from external gateways of the study area. Appendix F of the 2022 TMP and TYLin's calculations are provided in **Appendix G**.

The 2022 TMP site traffic O-D matrices assumed the Main Street extension to Trafalgar Road. Given the design and construction timeline for the Main Street extension outlined in the MCEA, construction of Main Street East from Sixth Line to Trafalgar Road is not currently defined and is expected to be constructed sometime beyond 2035. Since the Main Street extension to Trafalgar Road is not planned to be constructed by the 2031 horizon year, the trip distribution from Main Street has been reassigned to take Derry Road, given the close proximity to the future Main Street extension and its central location within the Town's roadway network. The 2031 study horizon trip distribution is summarized in **Table 4-8**, without the GO Station and Main Street extension.

Table 4-8 External Gateway Trip Distribution: 2031 Without GO

Gateway Number	Location	AM (IN)	AM (OUT)	PM (IN)	PM (OUT)
1	Trafalgar Road to/from north	10.47%	15.62%	15.68%	10.15%
2	Eighth Line to/from north	0.00%	0.00%	0.00%	0.00%
3	Derry Road to/from east	4.87%	4.05%	4.11%	4.89%
4	Britannia Road to/from east	3.29%	3.46%	3.45%	3.37%
5	Lower Base Line to/from east	4.74%	5.46%	5.37%	4.89%
6	Trafalgar Road to/from south	23.12%	19.80%	19.79%	24.02%
7	Lower Base Line to/from west	0.86%	0.94%	0.92%	0.81%
8	Britannia Road to/from west	14.16%	13.70%	13.63%	15.09%
9	Derry Road to/from west	15.55%	14.94%	14.98%	14.91%
10	Highway 401 to/from east	7.77%	7.30%	7.25%	7.59%
11	Highway 401 to/from west	15.15%	14.72%	14.81%	14.28%
12	Main Street to/from west	0.00%	0.00%	0.00%	0.00%
13	Louis St. Laurent to/from west	0.00%	0.00%	0.00%	0.00%
TOTAL		**100.00%**	**100.00%**	**100.00%**	**100.00%**

For the 2041 study horizon years, **Table 4-9** and **Table 4-10** summarize the trip distribution to the external gateways at the boundaries of the study area, without the GO Station and with the GO Station, respectively.

Table 4-9 External Gateway Trip Distribution: 2041 Without GO

Gateway Number	Location	AM (IN)	AM (OUT)	PM (IN)	PM (OUT)
1	Trafalgar Road to/from north	10.47%	15.62%	15.68%	10.15%
2	Eighth Line to/from north	0.00%	0.00%	0.00%	0.00%
3	Derry Road to/from east	4.87%	4.05%	4.11%	4.89%
4	Britannia Road to/from east	3.29%	3.46%	3.45%	3.37%
5	Lower Base Line to/from east	4.74%	5.46%	5.37%	4.89%
6	Trafalgar Road to/from south	23.12%	19.80%	19.79%	24.02%
7	Lower Base Line to/from west	0.86%	0.94%	0.92%	0.81%
8	Britannia Road to/from west	14.16%	13.70%	13.63%	15.09%
9	Derry Road to/from west	8.76%	8.45%	8.48%	8.49%
10	Highway 401 to/from east	7.77%	7.30%	7.25%	7.59%
11	Highway 401 to/from west	15.15%	14.72%	14.81%	14.28%
12	Main Street to/from west	6.79%	6.49%	6.51%	6.42%
13	Louis St. Laurent to/from west	0.00%	0.00%	0.00%	0.00%
TOTAL		**100.00%**	**100.00%**	**100.00%**	**100.00%**

Table 4-10 External Gateway Trip Distribution: 2041 With GO

Gateway Number	Location	AM (IN)	AM (OUT)	PM (IN)	PM (OUT)
1	Trafalgar Road to/from north	10.42%	15.38%	15.32%	10.26%
2	Eighth Line to/from north	0.00%	0.00%	0.00%	0.00%
3	Derry Road to/from east	5.27%	4.34%	4.25%	5.31%
4	Britannia Road to/from east	2.93%	3.11%	2.96%	2.88%
5	Lower Base Line to/from east	4.34%	5.29%	5.08%	4.29%
6	Trafalgar Road to/from south	22.49%	19.44%	19.53%	22.97%
7	Lower Base Line to/from west	0.68%	0.71%	0.73%	0.64%
8	Britannia Road to/from west	12.88%	12.74%	12.29%	13.06%
9	Derry Road to/from west	10.29%	9.42%	9.51%	10.49%
10	Highway 401 to/from east	8.72%	7.73%	7.73%	8.65%
11	Highway 401 to/from west	15.09%	15.28%	15.39%	14.83%
12	Main Street to/from west	6.89%	6.56%	7.21%	6.63%
13	Louis St. Laurent to/from west	0.00%	0.00%	0.00%	0.00%
TOTAL		**100.00%**	**100.00%**	**100.00%**	**100.00%**

For the 2051 study horizon year, the distribution of site traffic derived from the 2022 Trafalgar TMP was modified to account for the impact of the extension of Louis St. Laurent Avenue to Trafalgar Road. It was assumed that a portion of traffic that travelled to/from the west via Derry Road or Britannia Road would divert to the new route to/from the west via the extension of Louis St. Laurent Avenue to Trafalgar Road that is expected to be completed by 2051. It was assumed that 20% of the total traffic traveling to/from the west via Derry Road and Britannia Road would shift to Louis St. Laurent Avenue. The amount of traffic shifted from each existing road to Louis St. Laurent Avenue was calculated in proportion to each road's share of traffic. calculations are provided in **Appendix G**.

For the 2051 study horizon year, **Table 4-11** and **Table 4-12** summarize the trip distribution to the external gateways at the boundaries of the study area, without the GO Station and with the GO Station, respectively.

Table 4-11 External Gateway Trip Distribution: 2051 Without GO

Gateway Number	Location	AM (IN)	AM (OUT)	PM (IN)	PM (OUT)
1	Trafalgar Road to/from north	10.47%	15.62%	15.68%	10.15%
2	Eighth Line to/from north	0.00%	0.00%	0.00%	0.00%
3	Derry Road to/from east	4.87%	4.05%	4.11%	4.89%
4	Britannia Road to/from east	3.29%	3.46%	3.45%	3.37%
5	Lower Base Line to/from east	4.74%	5.46%	5.37%	4.89%
6	Trafalgar Road to/from south	23.12%	19.80%	19.79%	24.02%
7	Lower Base Line to/from west	0.86%	0.94%	0.92%	0.81%
8	Britannia Road to/from west	11.33%	10.96%	10.90%	12.07%
9	Derry Road to/from west	7.01%	6.76%	6.78%	6.79%
10	Highway 401 to/from east	7.77%	7.30%	7.25%	7.59%
11	Highway 401 to/from west	15.15%	14.72%	14.81%	14.28%
12	Main Street to/from west	6.79%	6.49%	6.51%	6.42%
13	Louis St. Laurent to/from west	4.58%	4.43%	4.42%	4.71%
TOTAL		**100.00%**	**100.00%**	**100.00%**	**100.00%**

Table 4-12 External Gateway Trip Distribution: 2051 With GO

Gateway Number	Location	AM (IN)	AM (OUT)	PM (IN)	PM (OUT)
1	Trafalgar Road to/from north	10.42%	15.38%	15.32%	10.26%
2	Eighth Line to/from north	0.00%	0.00%	0.00%	0.00%
3	Derry Road to/from east	5.27%	4.34%	4.25%	5.31%
4	Britannia Road to/from east	2.93%	3.11%	2.96%	2.88%
5	Lower Base Line to/from east	4.34%	5.29%	5.08%	4.29%
6	Trafalgar Road to/from south	22.49%	19.44%	19.53%	22.97%
7	Lower Base Line to/from west	0.68%	0.71%	0.73%	0.64%
8	Britannia Road to/from west	10.31%	10.19%	9.83%	10.45%
9	Derry Road to/from west	8.23%	7.54%	7.60%	8.39%
10	Highway 401 to/from east	8.72%	7.73%	7.73%	8.65%
11	Highway 401 to/from west	15.09%	15.28%	15.39%	14.83%
12	Main Street to/from west	6.89%	6.56%	7.21%	6.63%
13	Louis St. Laurent to/from west	4.63%	4.43%	4.36%	4.71%
TOTAL		**100.00%**	**100.00%**	**100.00%**	**100.00%**

4.8 Trip Assignment

Site assignment was based on a TAZ-specific level, as trip generation estimates were tailored to each TAZ's proposed land uses and residential unit types. Trips were further subdivided into internal and external trips for assignment purposes, as discussed in **Section 4.6**.

Figure 4-2 outlines the location of existing and future study intersections throughout the Agerton Secondary Plan area. Due to the large number of intersections analyzed and the layout of the proposed collector road system, all study intersections are not able to be presented on a single traffic volume figure. **Figure 4-2** provides the intersection ID number assigned to each intersection and collector road names to be used in conjunction with site traffic volume figures.

2051 full build-out site traffic (with GO scenario) volumes at external intersections are provided in **Figure 4-3**. Predicted 2051 site traffic volumes at the intersections of new collector roads with existing arterial roads are provided in **Figure 4-4**, while volumes at internal collector-to-collector intersections for full build-out are provided in **Figure 4-5**. Site traffic volumes for other horizon years and scenarios are provided in **Appendix H**.

4.8.1 External Assignment

External trips to/from each TAZ were assigned first to a collector road within or adjacent to the TAZ and then traveled via logical routing to one of the external road network gateways, as per the trip distributions summarized in **Section 4.7**.

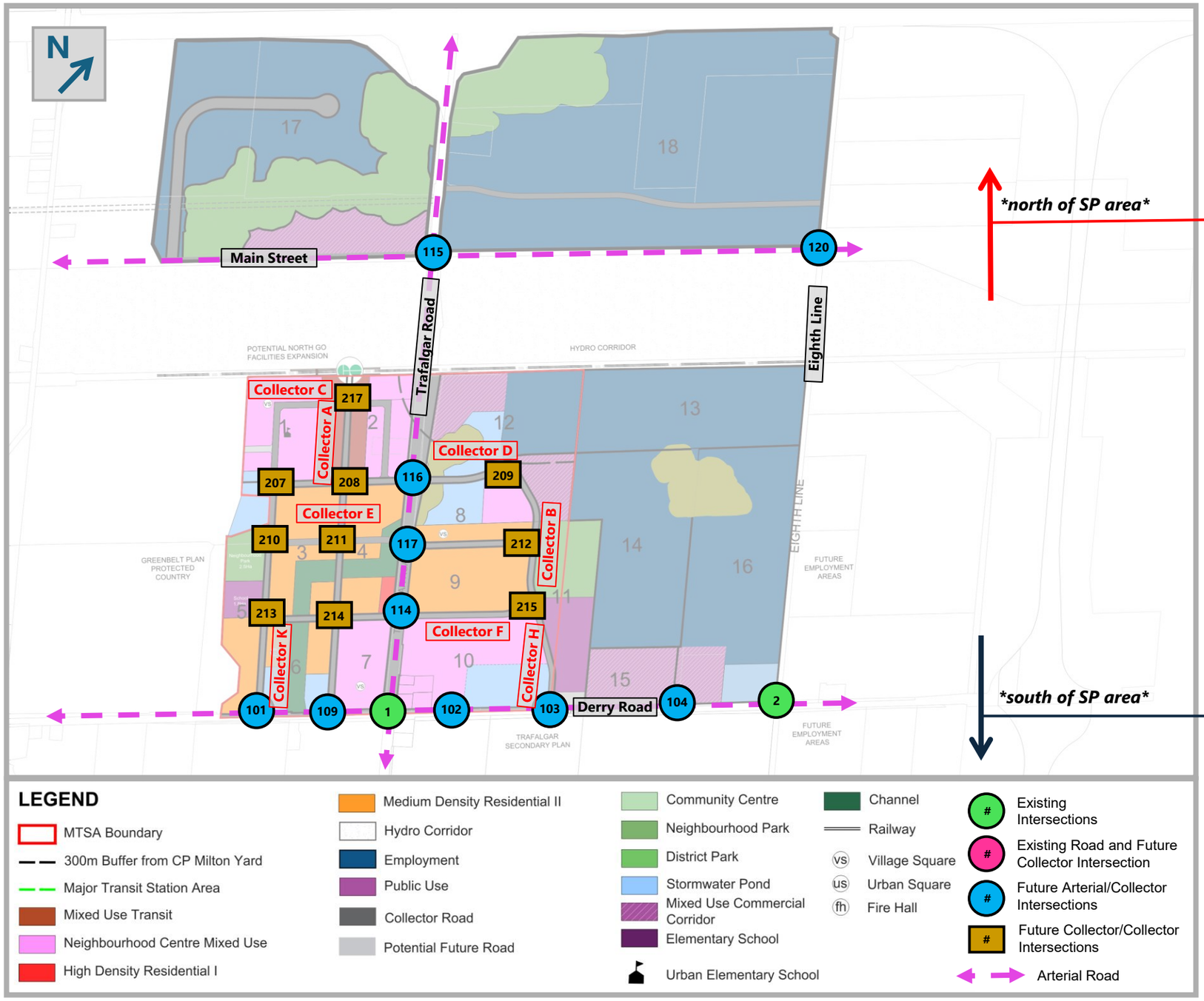
4.8.2 Internal Assignment

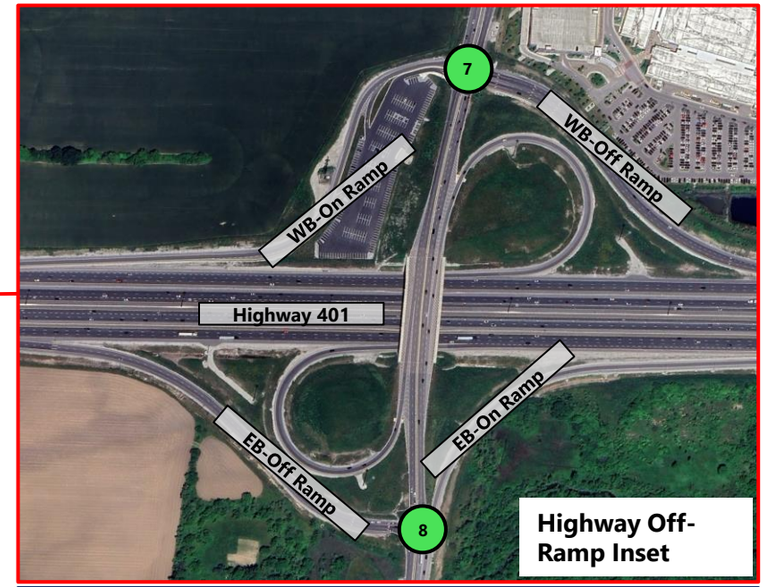
Internal site assignment was applied to non-residential land uses such as schools and retail blocks that would attract vehicle trips from within the Agerton Secondary Plan's boundaries. The internal assignment of site trips did not further reduce the total net trips generated by the Tertiary Plan, it merely kept a portion of the trips internal to the site instead of 100% of the net trips being assigned to external road network gateways.

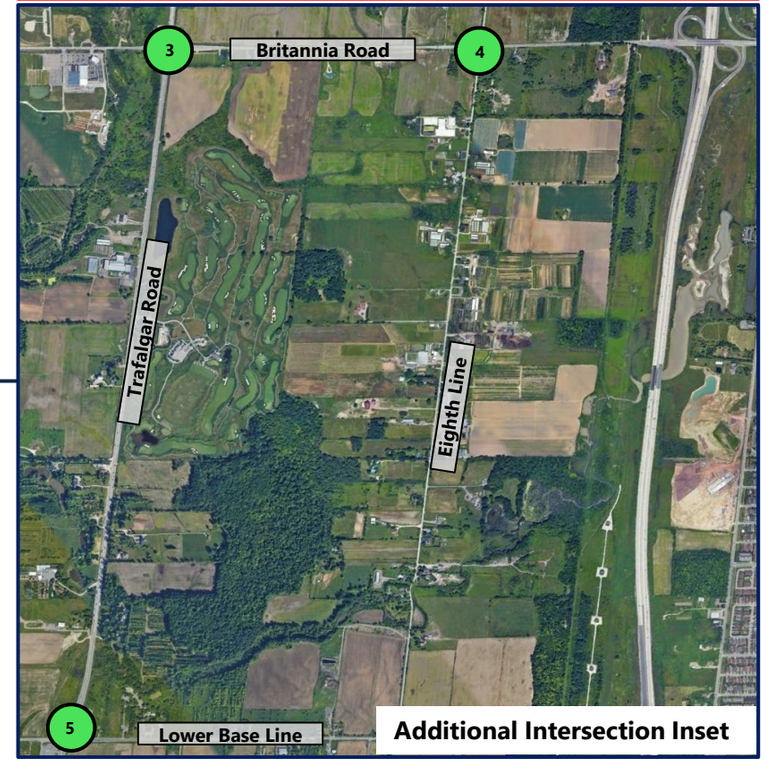
In the case of land uses for which internal assignment applied, such as schools, a "catchment area" approach as taken. For example, each TAZ with residential units was assigned to the elementary school, imitating a school's catchment area. Inbound and outbound internal trips generated by the school were assigned to/from each TAZ in the catchment area proportionate to the number of residential units in each TAZ.

Completing internal assignment should be considered a conservative measure, particularly when it comes to the design of the collector road intersections and assessment of capacity. Internal assignment accounts for trips completed between TAZs (between residential and non-residential land uses), and not just commuter traffic in and out of the Agerton Secondary Plan area. This results in more varied travel patterns throughout the collector road network, ensuring the collector roads

and intersections have been designed with sufficient capacity for both internal and external traffic travel patterns.

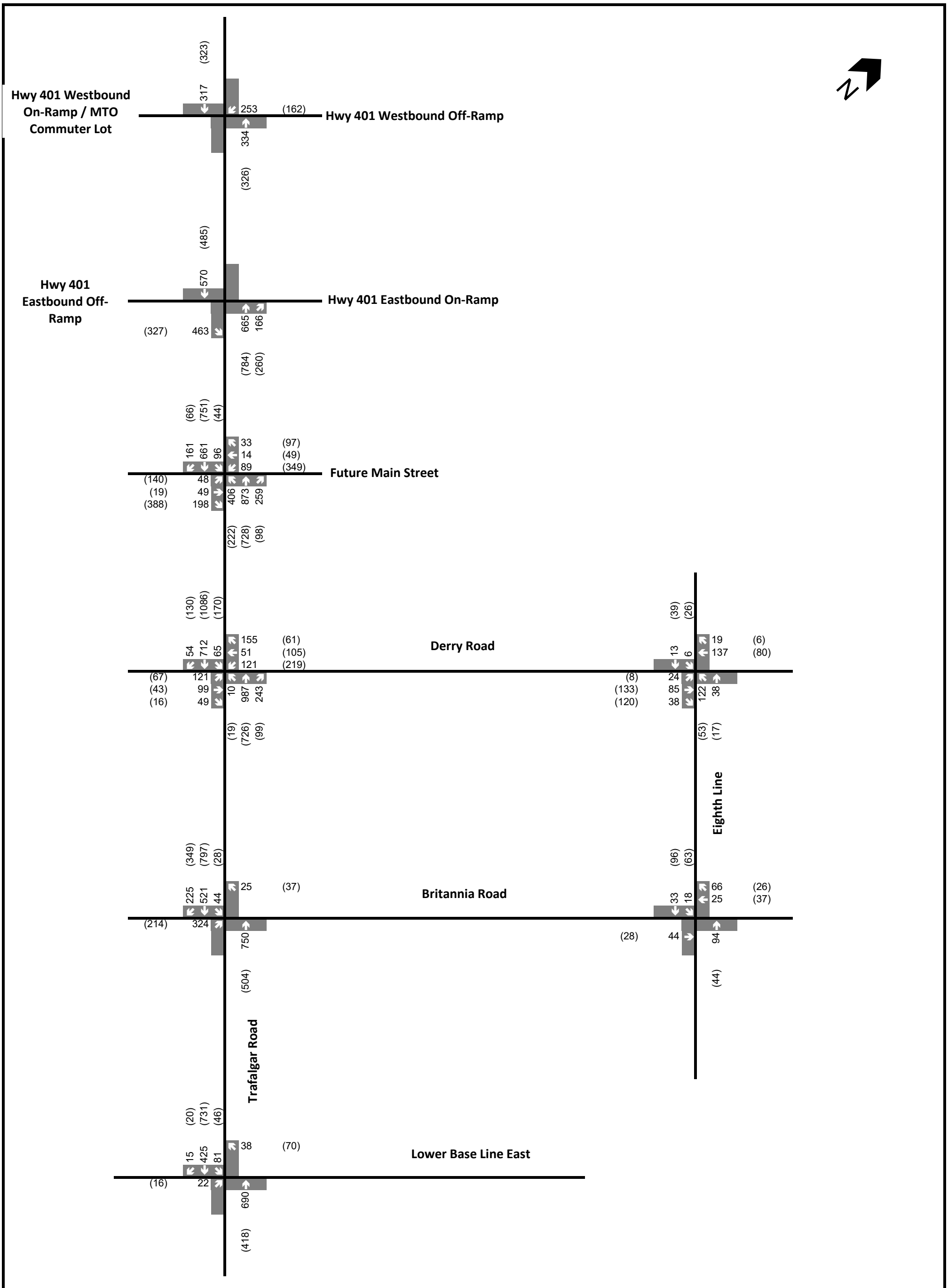






LEGEND

- MTSA Boundary
- 300m Buffer from CP Milton Yard
- Major Transit Station Area
- Mixed Use Transit
- Neighbourhood Centre Mixed Use
- High Density Residential I
- Medium Density Residential II
- Hydro Corridor
- Employment
- Public Use
- Collector Road
- Potential Future Road
- Community Centre
- Neighbourhood Park
- District Park
- Stormwater Pond
- Mixed Use Commercial Corridor
- Elementary School
- Urban Elementary School
- Channel
- Railway
- (vs) Village Square
- (us) Urban Square
- (fh) Fire Hall
- (#) Existing Intersections
- (#) Existing Road and Future Collector Intersection
- (#) Future Arterial/Collector Intersections
- (#) Future Collector/Collector Intersections
- Arterial Road



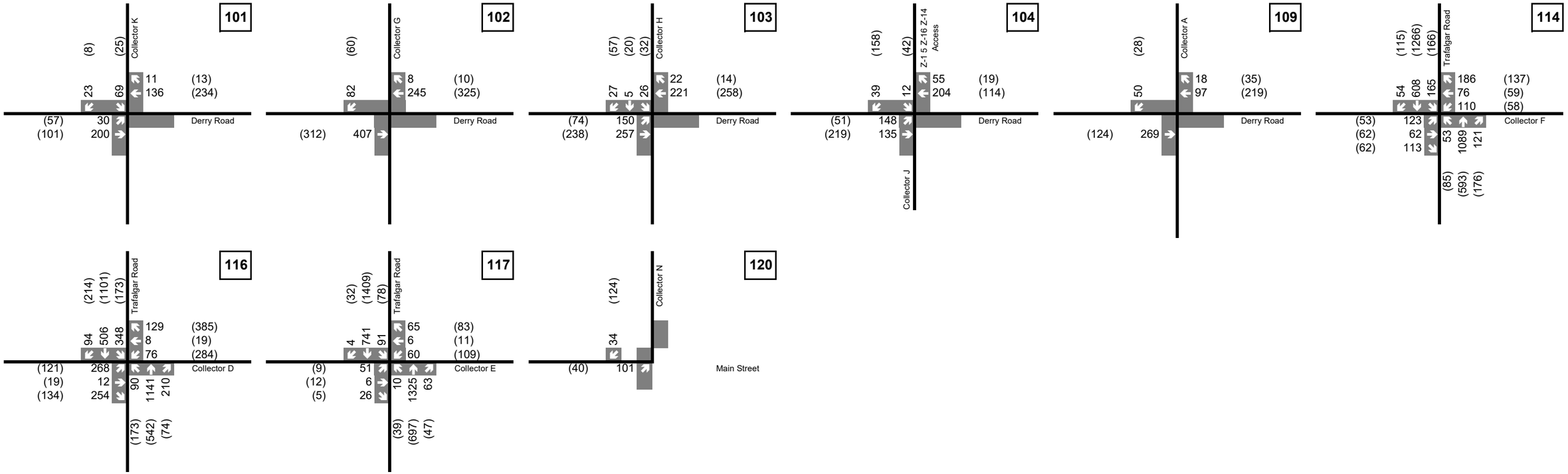
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 4-3

2051 Full Build-Out Site Traffic Volumes (With GO Station)
External Intersections

FUTURE ARTERIAL-COLLECTOR INTERSECTIONS



Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

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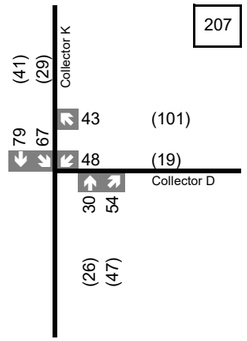
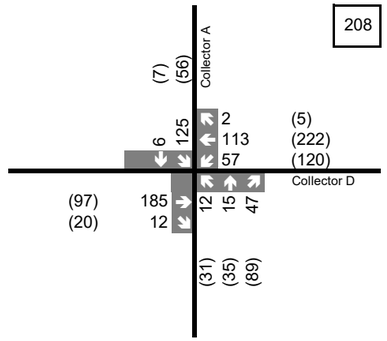
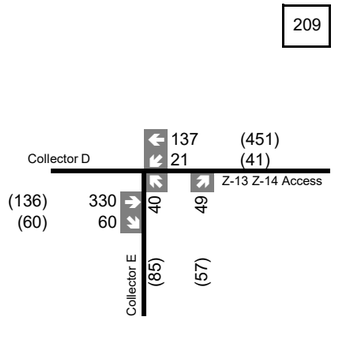
Figure 4-4

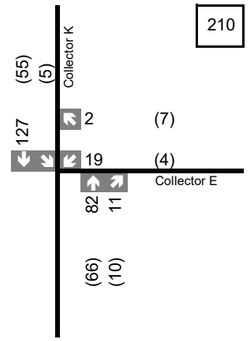
2051 Full Build-Out Site Traffic Volumes (With GO Station)
Arterial-Collector Intersections

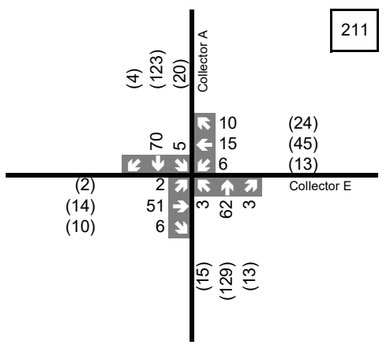
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

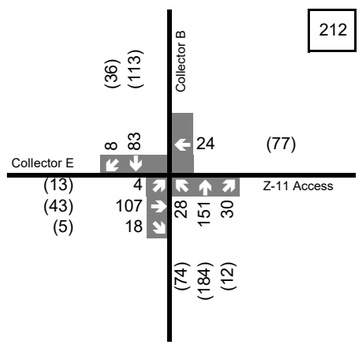


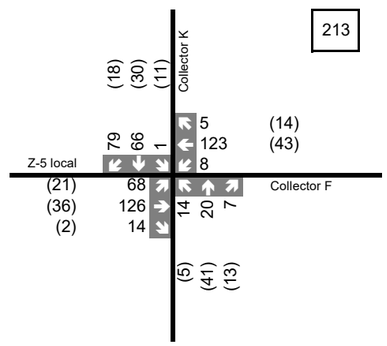


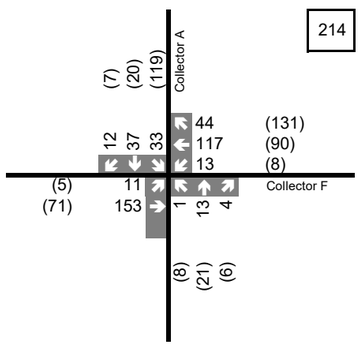


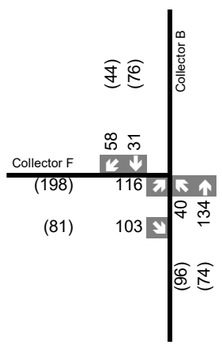


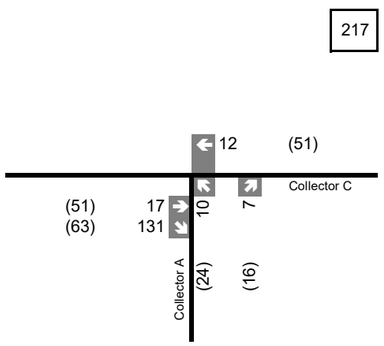












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Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 4-5

2051 Full Build-Out Site Traffic Volumes (With GO)
Collector-Collector Intersections

5 FUTURE TOTAL CONDITIONS

5.1 Future Total Traffic Volumes

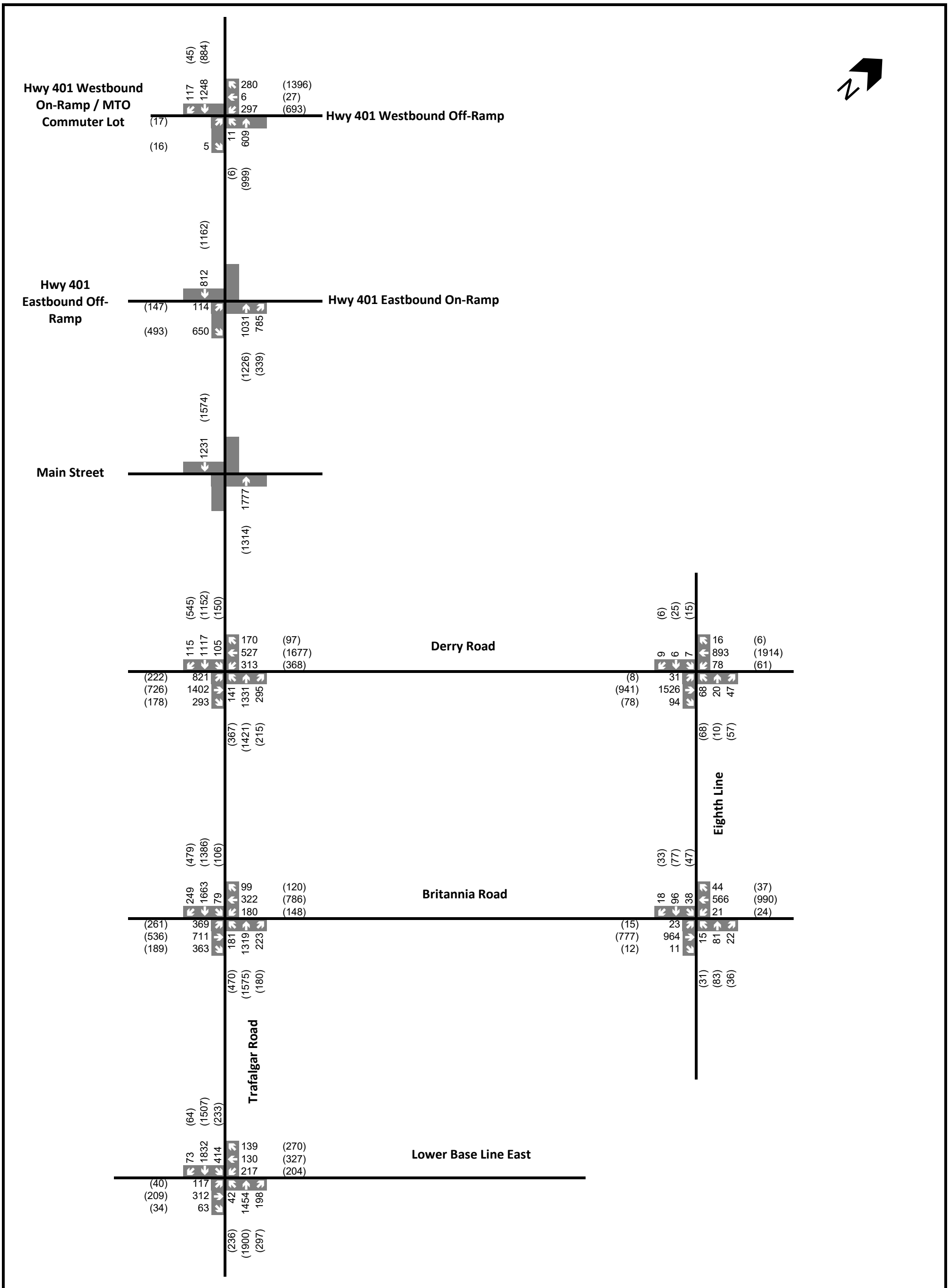
The future total volumes were developed by combining the future background volumes with the estimated site traffic, Trafalgar traffic, and background traffic rerouting adjustments derived from the March 2022 Trafalgar TMP Addendum. This analysis incorporates three horizon years of future background data, with two sets of trip generation calculations for each year under with- and without-GO Station scenarios.

For each traffic volume set, three distinct figures were prepared, including one for existing arterial intersections (plus the future intersection of Trafalgar Road and Main Street), one for arterial-collector intersections, and one for collector-collector intersections, as tabulated in **Table 5-1**, illustrating the future total traffic volumes across all scenarios and horizon years.

Table 5-1 Summary of Future Total Traffic Volume Figures

Horizon Year	Without GO Scenario			With GO Scenario		
	Arterial Intersections	Arterial-Collector Intersections	Collector-Collector Intersections	Arterial Intersections	Arterial-Collector Intersections	Collector-Collector Intersections
2031	Figure 5-1	Figure 5-2	Figure 5-3	-	-	-
2041	Figure 5-4	Figure 5-5	Figure 5-6	Figure 5-7	Figure 5-8	Figure 5-9
2051	Figure 5-10	Figure 5-11	Figure 5-12	Figure 5-13	Figure 5-14	Figure 5-15

Lane configuration figures for the future total road network are provided in **Figure 5-16**, **Figure 5-17,** and **Figure 5-18** for the 2031, 2041, and 2051 horizon years, respectively.



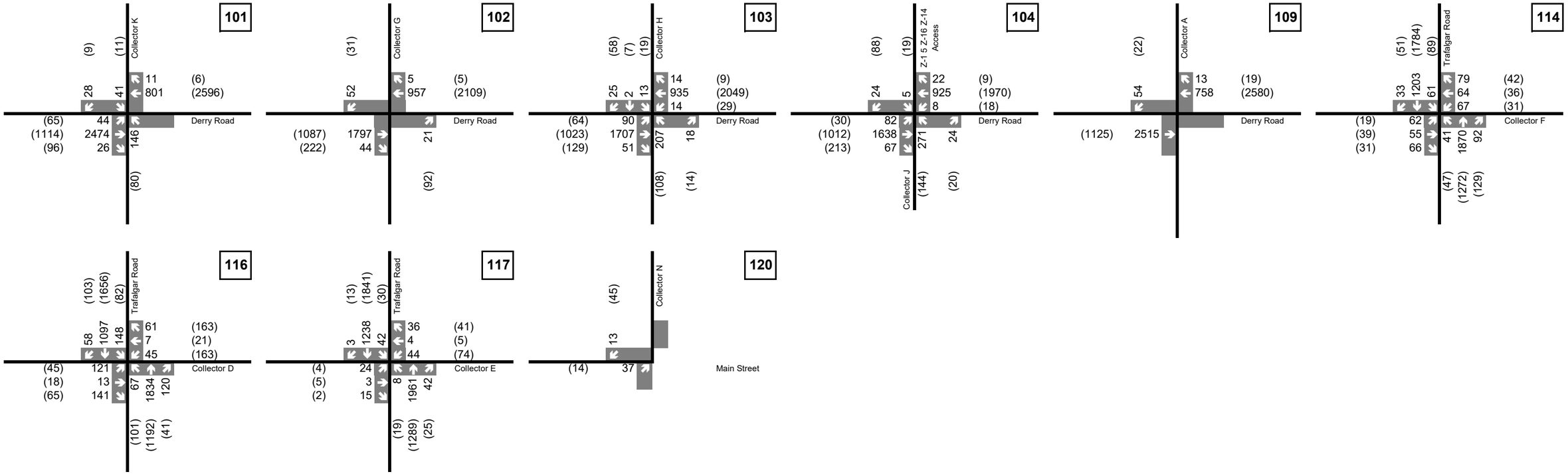
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-1

2031 Future Total Volumes (without GO station)
External Intersections

FUTURE ARTERIAL-COLLECTOR INTERSECTIONS



Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

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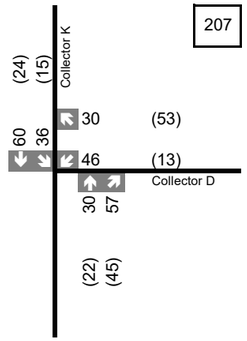
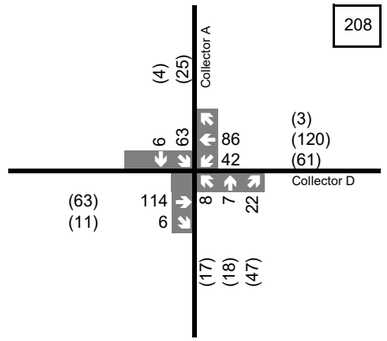
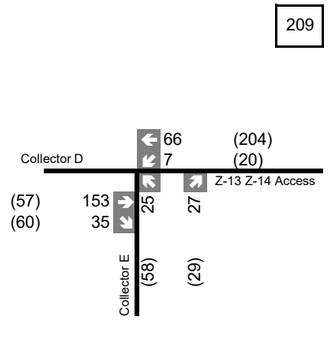
Figure 5-2

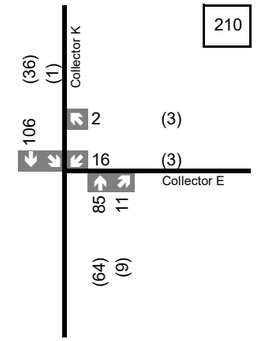
2031 Future Total Volumes (without GO station)
Arterial-Collector Intersections

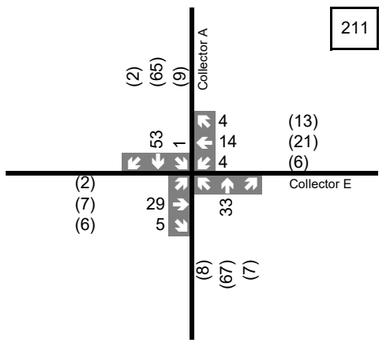
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

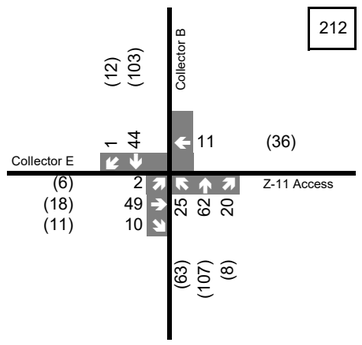


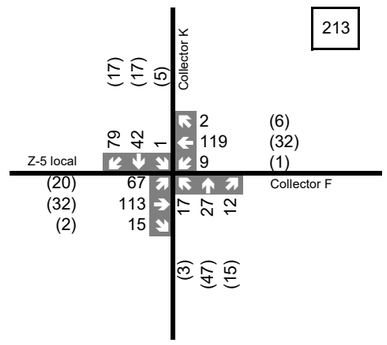


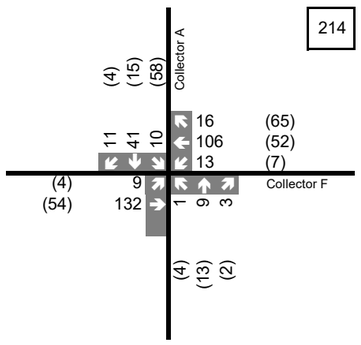


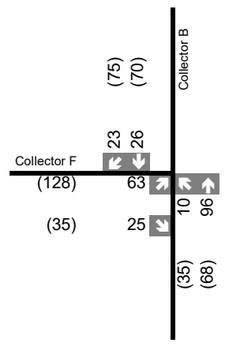


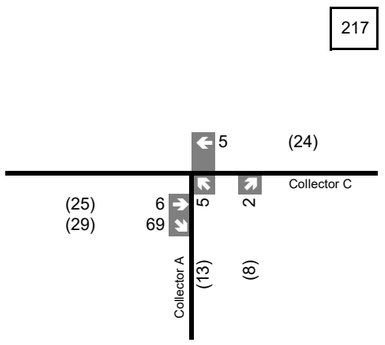












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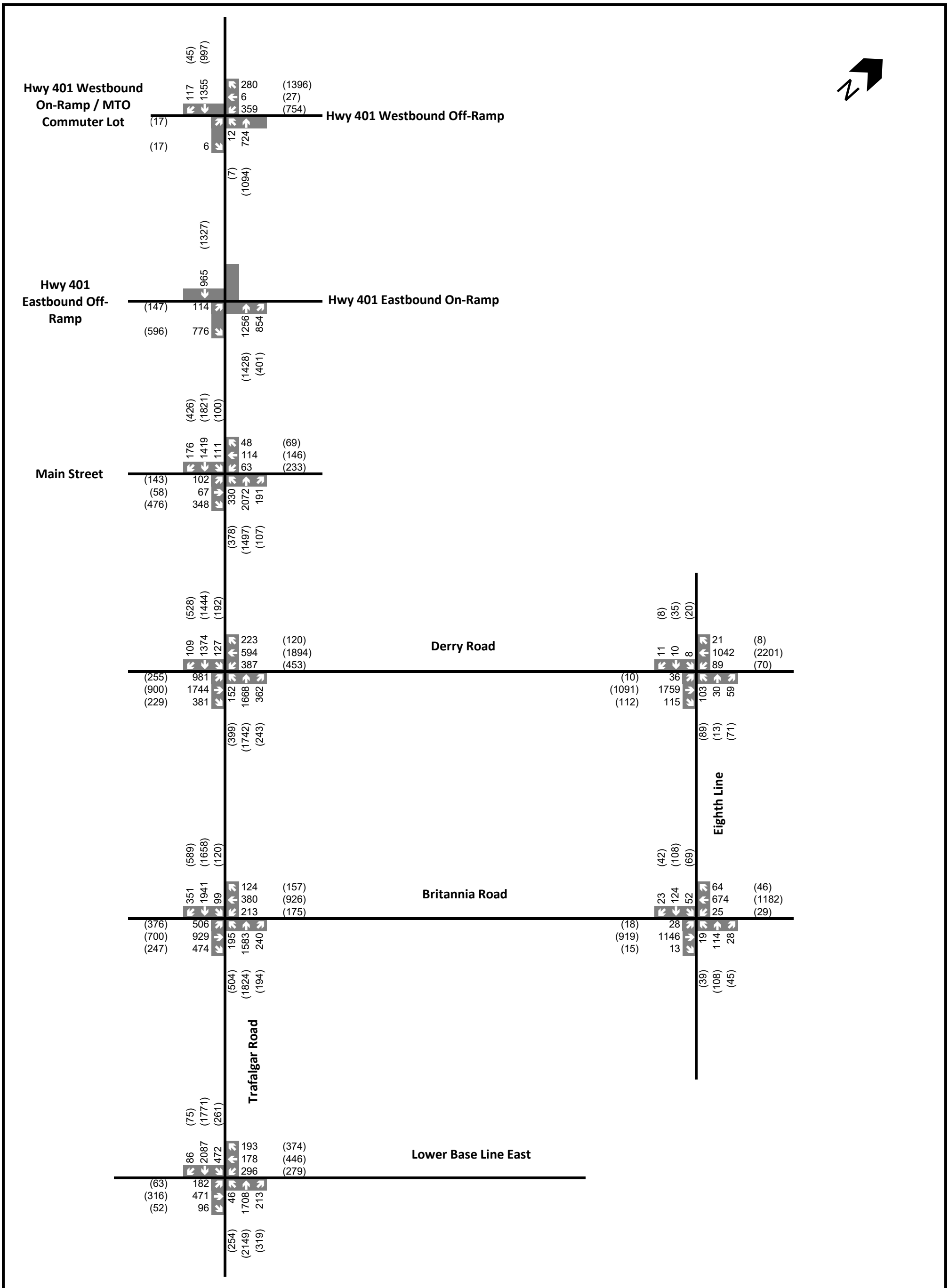
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-3

2031 Future Total Volumes (without GO station)
Collector-Collector Intersections



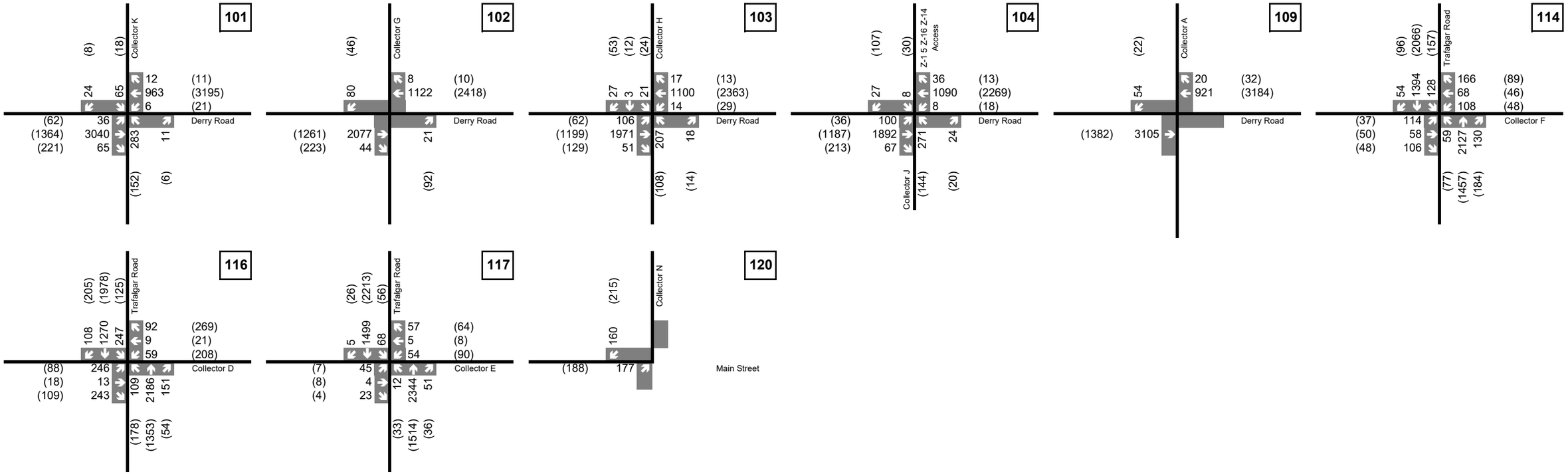
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-4

2041 Future Total Volumes (without GO station)
External Intersections

FUTURE ARTERIAL-COLLECTOR INTERSECTIONS



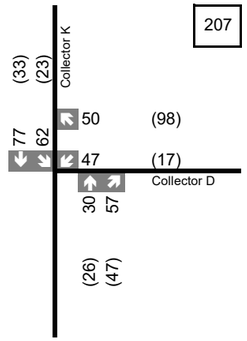
Legend

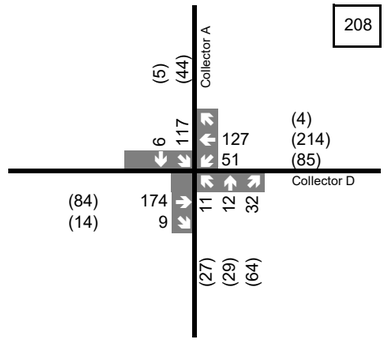
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

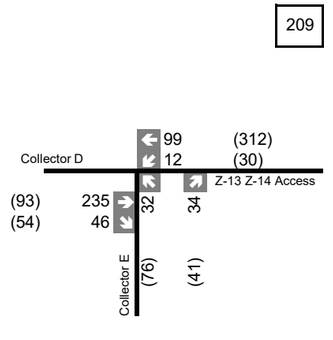
Figure 5-5

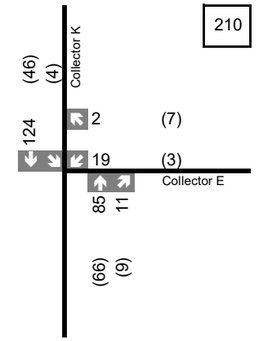
2041 Future Total Volumes (without GO station)
Arterial-Collector Intersections

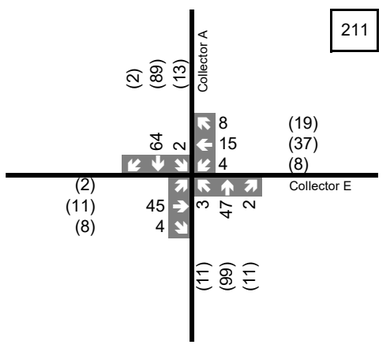
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

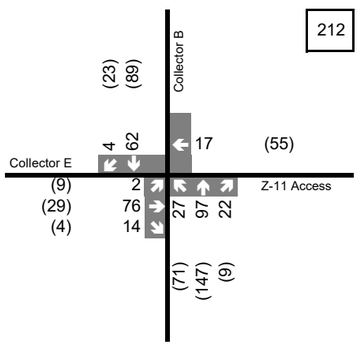


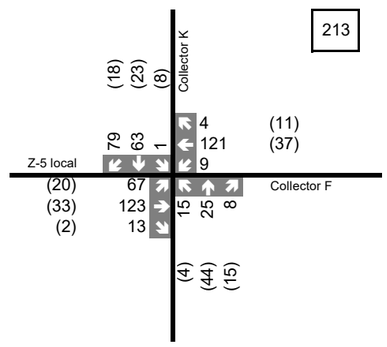


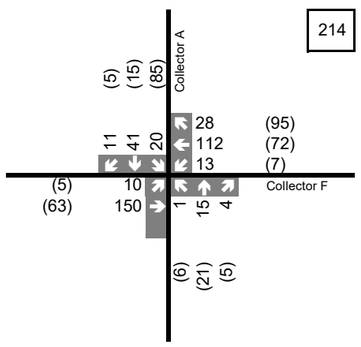


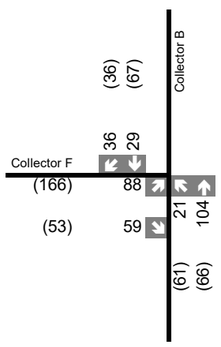


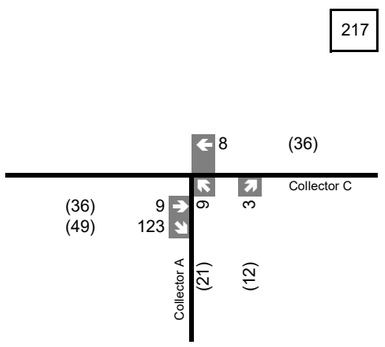












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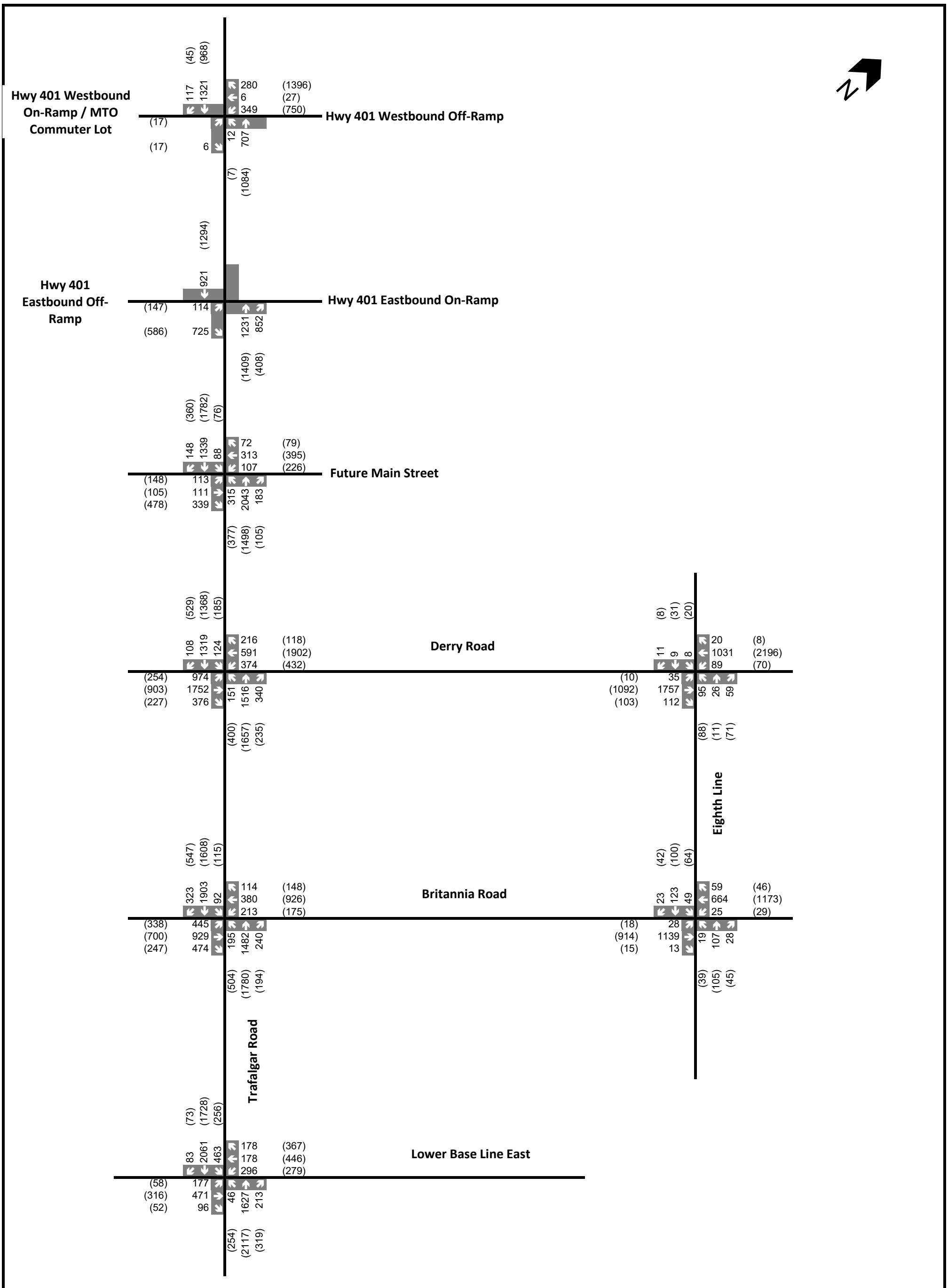
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-6

2041 Future Total Volumes (without GO station)
Collector-Collector Intersections



Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

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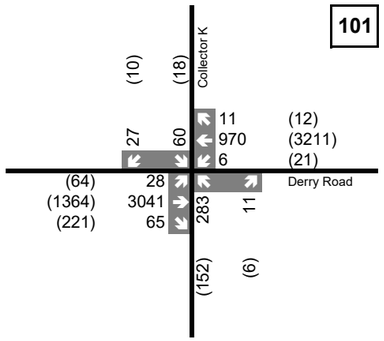
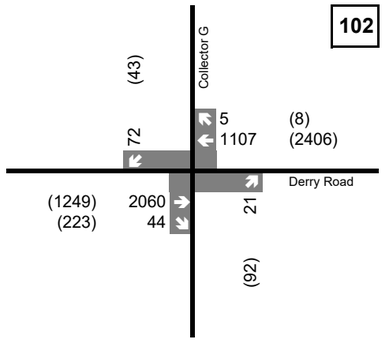
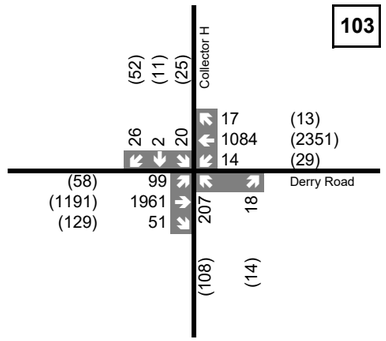
Figure 5-7

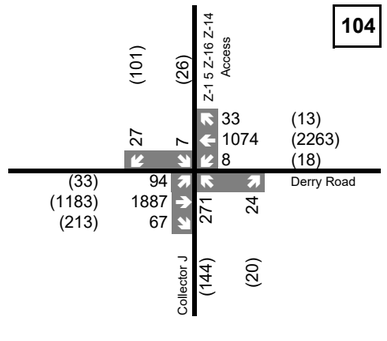
2041 Future Total Volumes (with GO station)
External Intersections

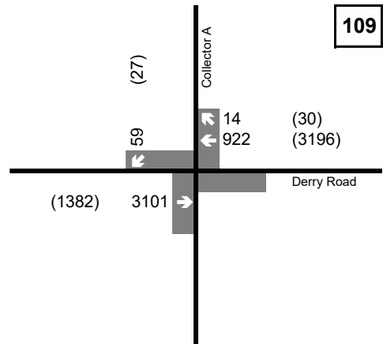
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

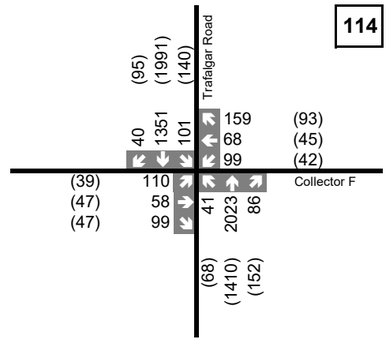


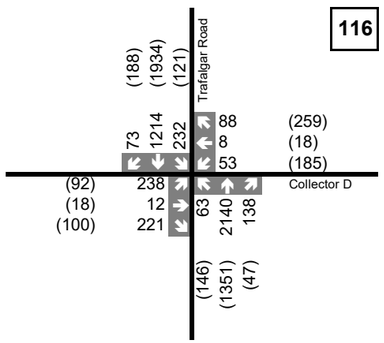


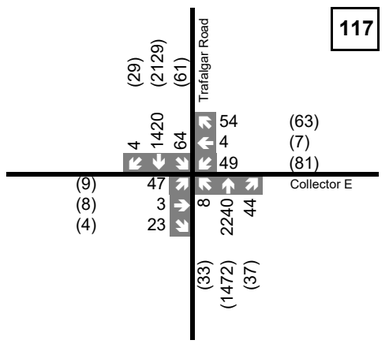


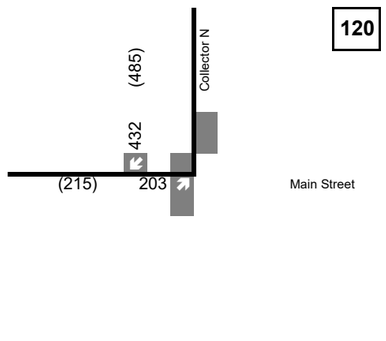












Legend

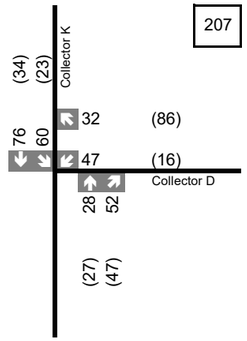
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

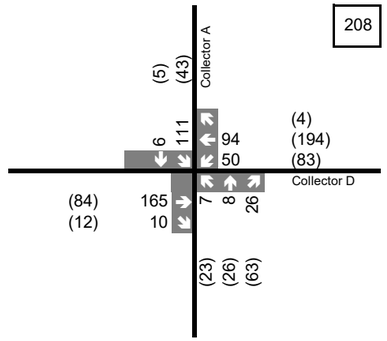
TYLin

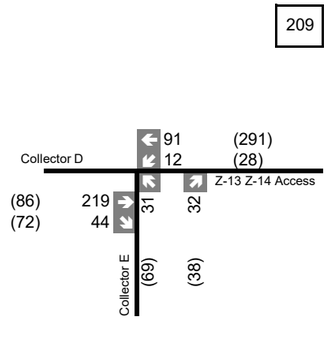
Figure 5-8

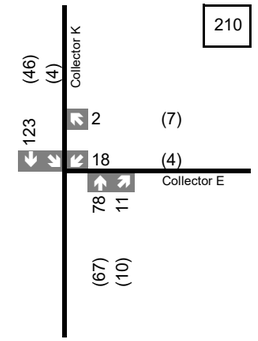
2041 Future Total Volumes (with GO station)
Arterial-Collector Intersections

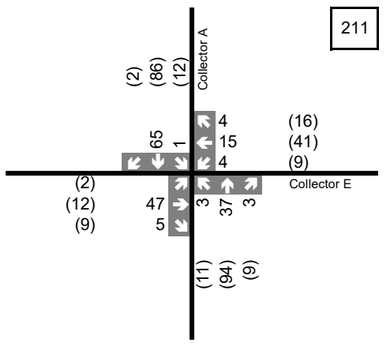
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

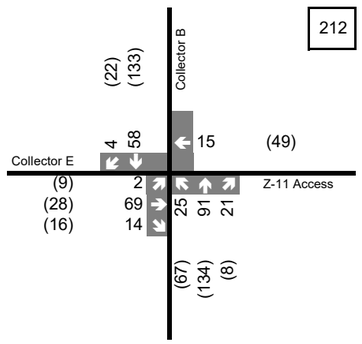


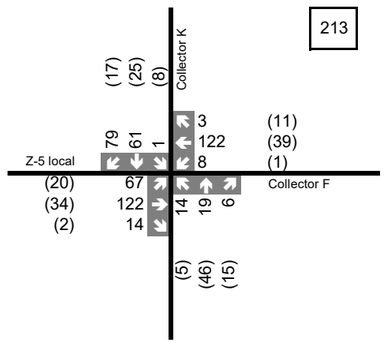


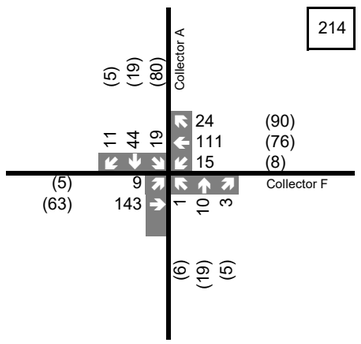


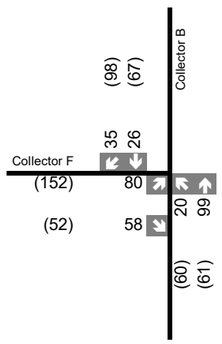


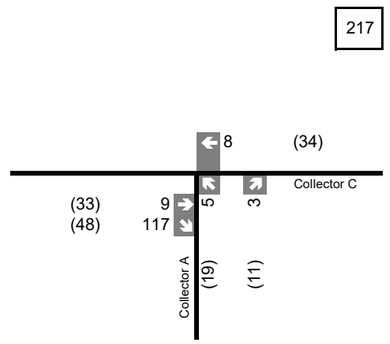












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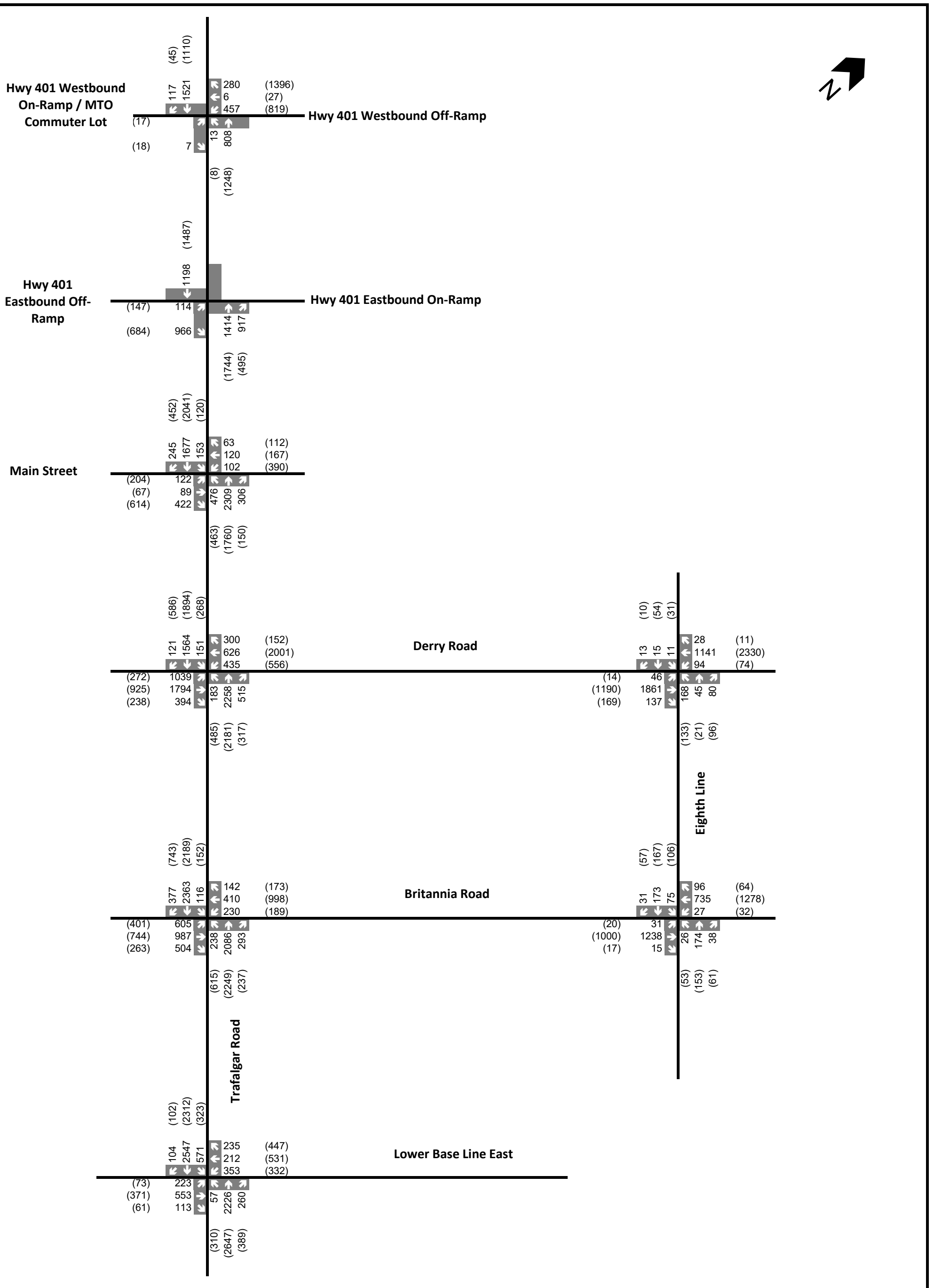
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-9

2041 Future Total Volumes (with GO station)
Collector-Collector Intersections



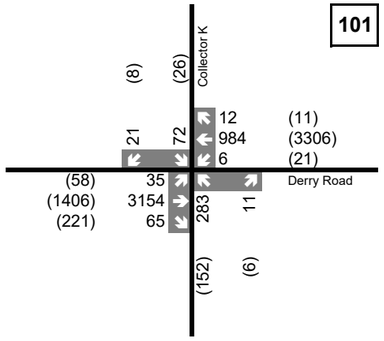
Legend

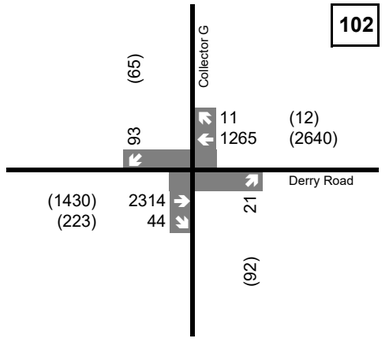
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

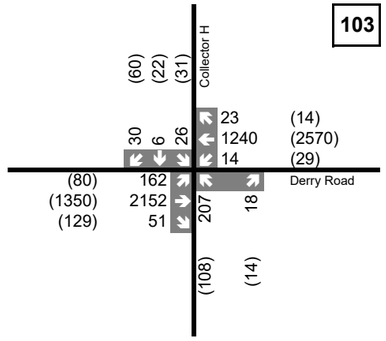
Figure 5-10

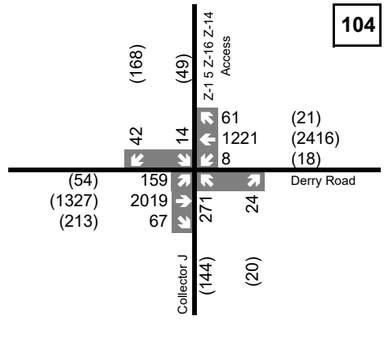
2051 Future Total Volumes (without GO station)
External Intersections

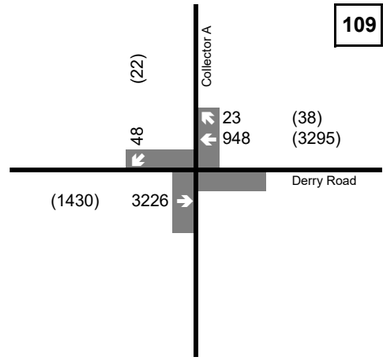
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

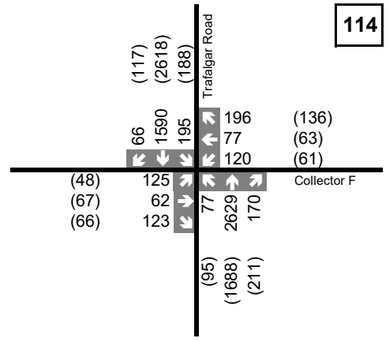


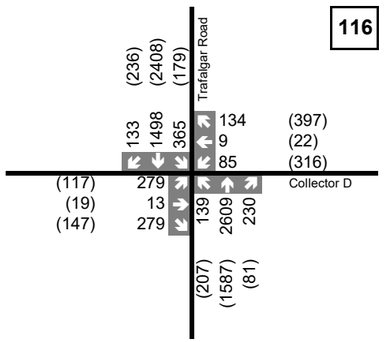


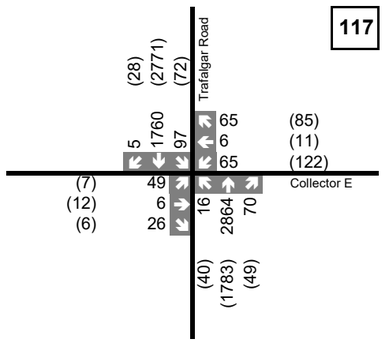












Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

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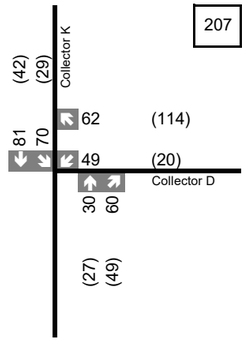
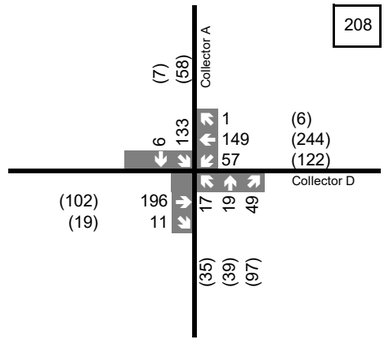
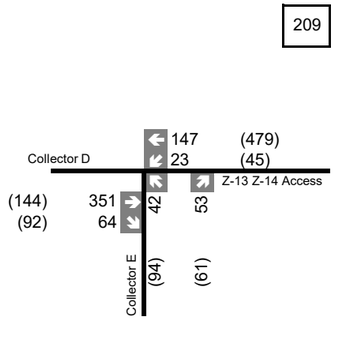
Figure 5-11

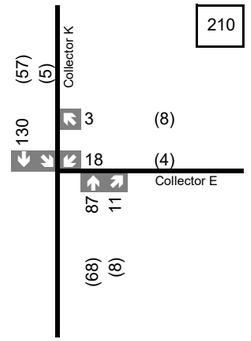
2051 Future Total Volumes (without GO station)
Arterial-Collector Intersections

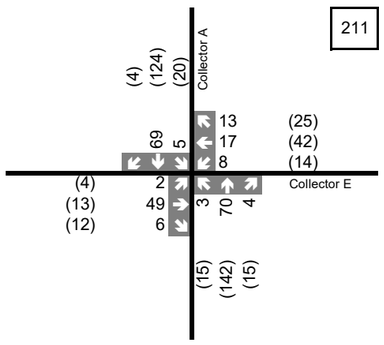
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

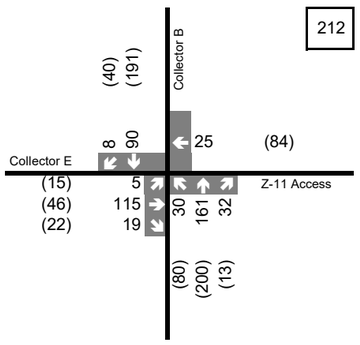


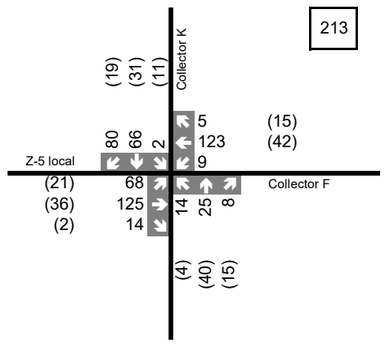


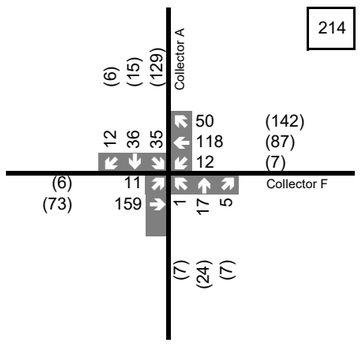


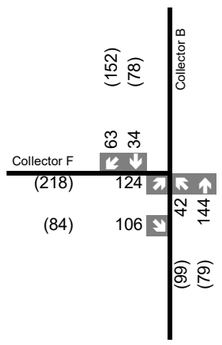


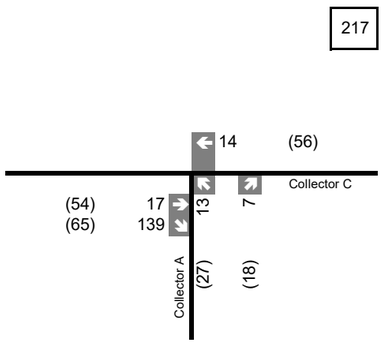












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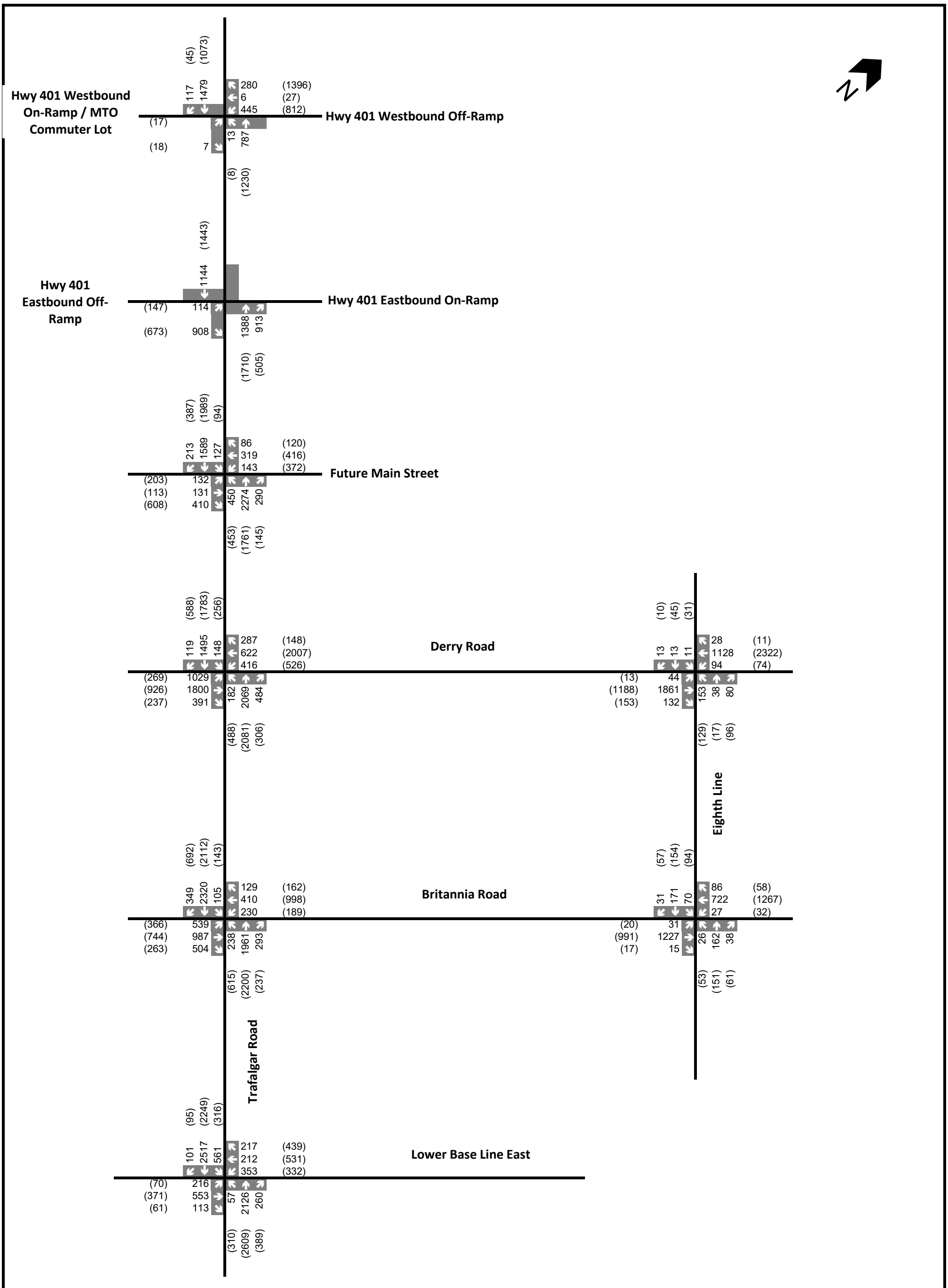
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-12

2051 Future Total Volumes (without GO station)
Collector-Collector Intersections



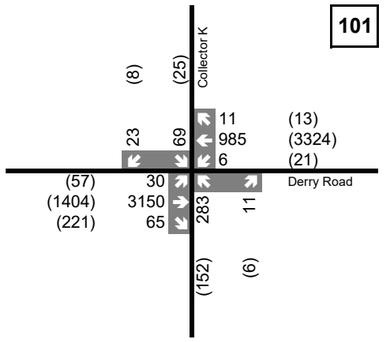
Legend

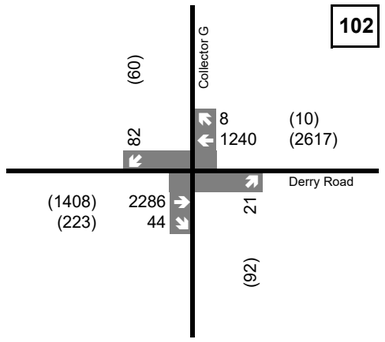
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

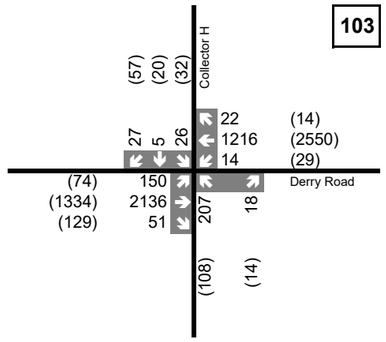
Figure 5-13

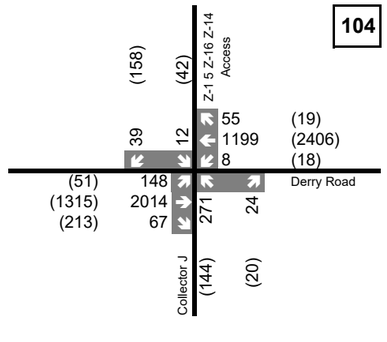
2051 Future Total Volumes (with GO station)
External Intersections

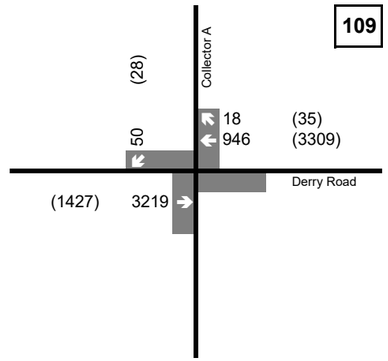
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

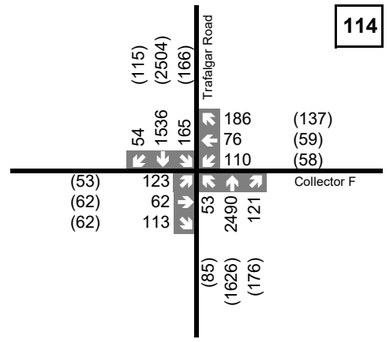


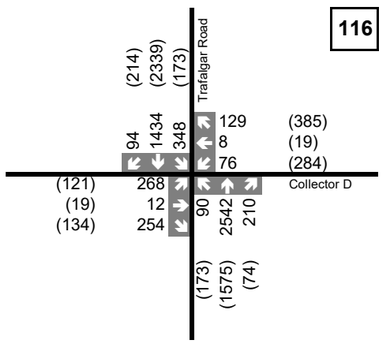


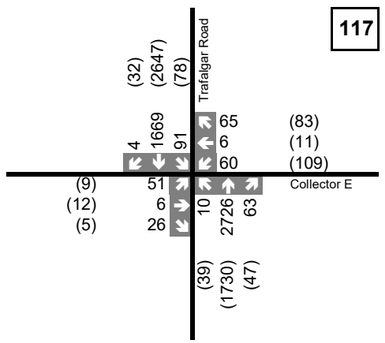












Legend

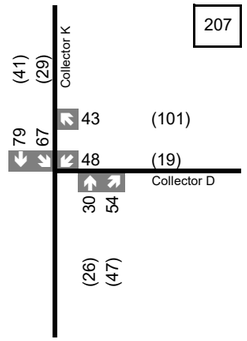
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

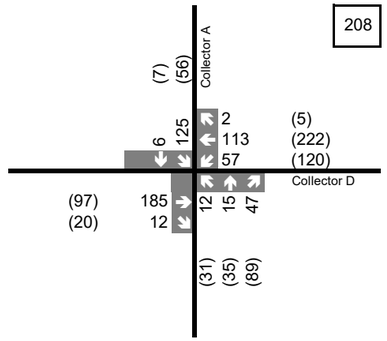
TYLin

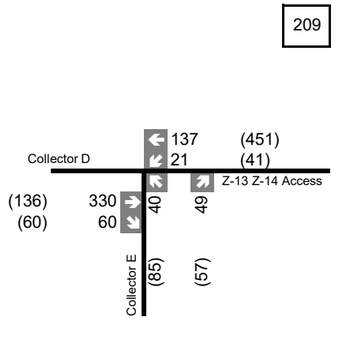
Figure 5-14

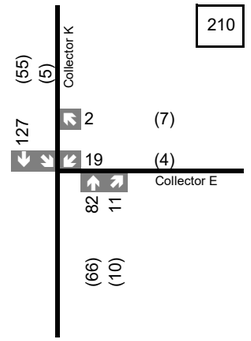
2051 Future Total Volumes (with GO station)
Arterial-Collector Intersections

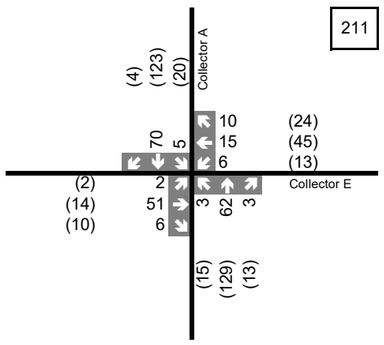
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

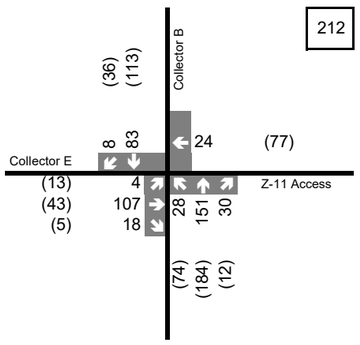


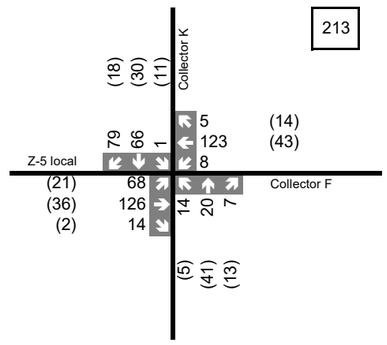


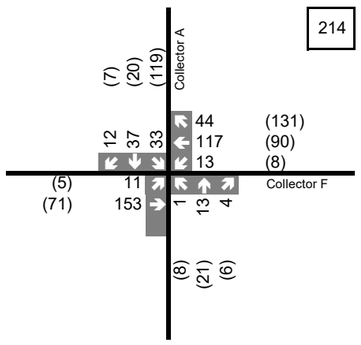


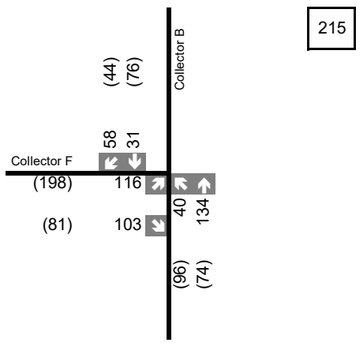


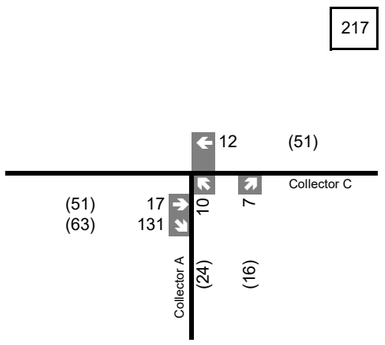












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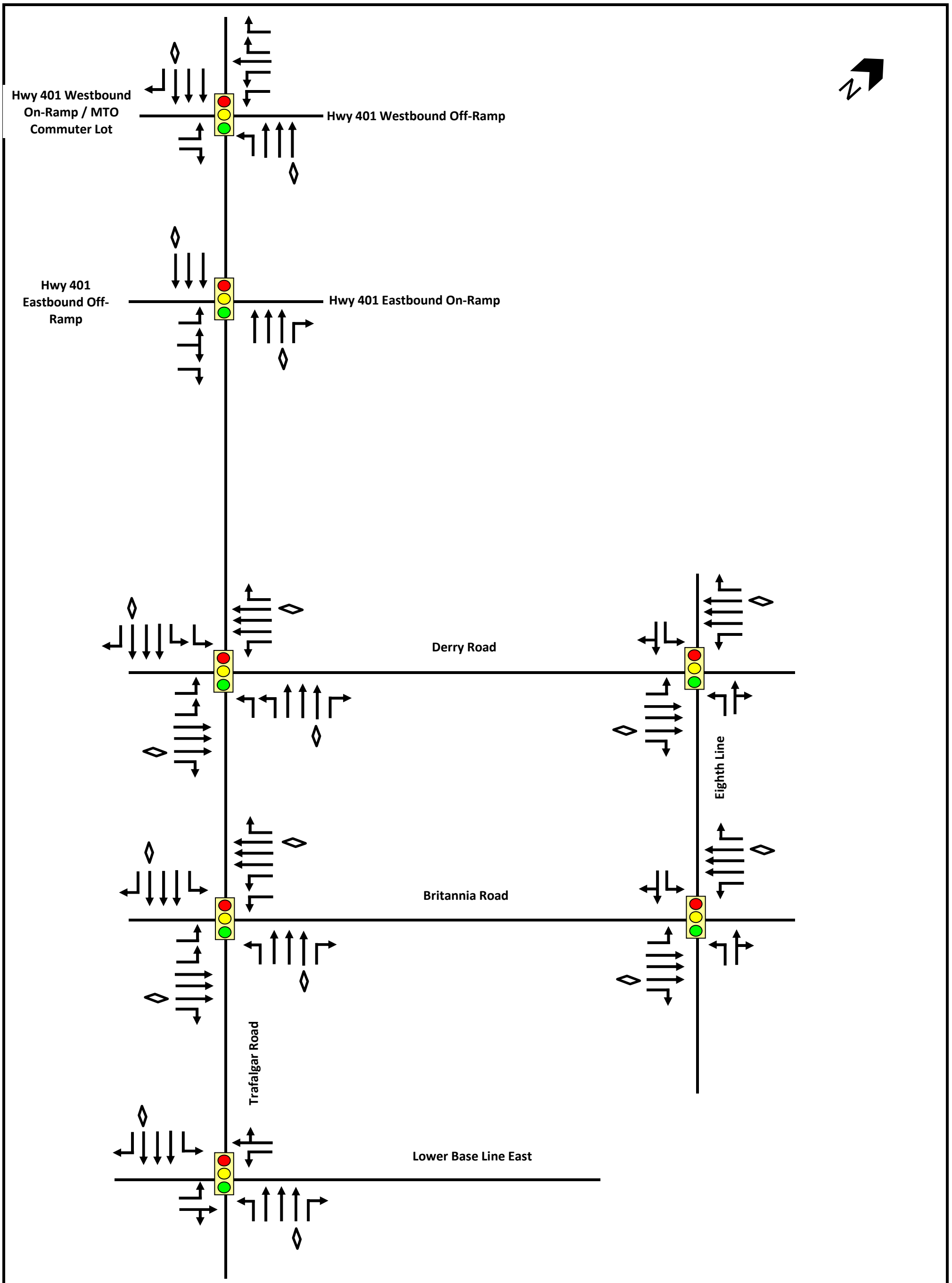
Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Figure 5-15

2051 Future Total Volumes (with GO station)
Collector-Collector Intersections



Legend

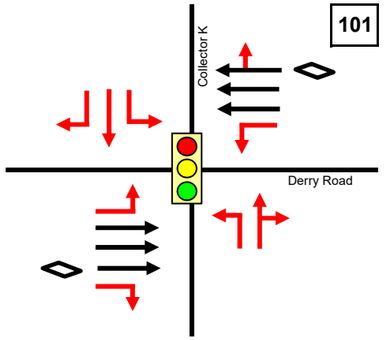
Signalized Intersection | Unsignalized Intersection | Lane | Proposed Lane | HOV Lane

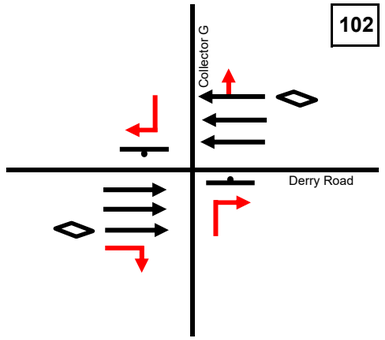
TYLin

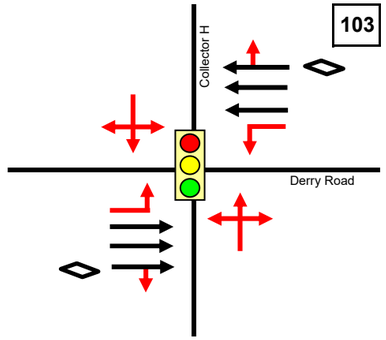
Figure 5-16a

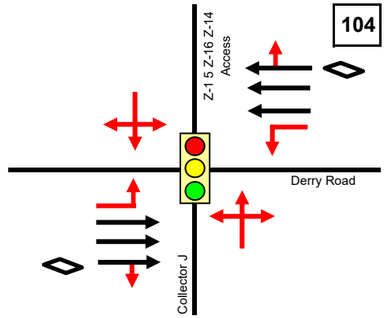
2031 Future Total Lane Configuration
External Intersections

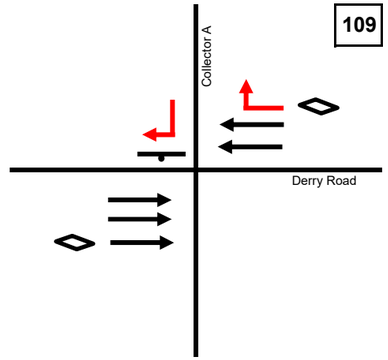
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

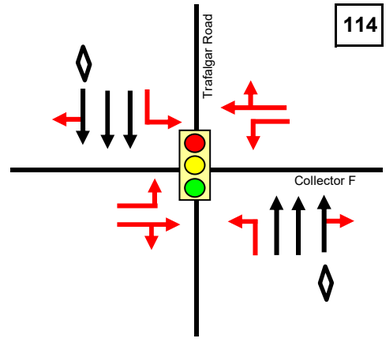


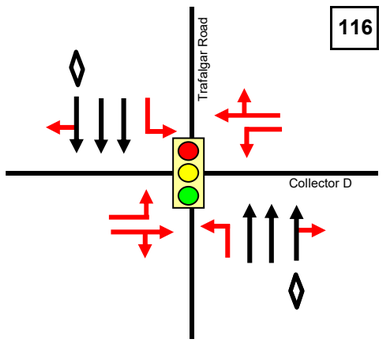


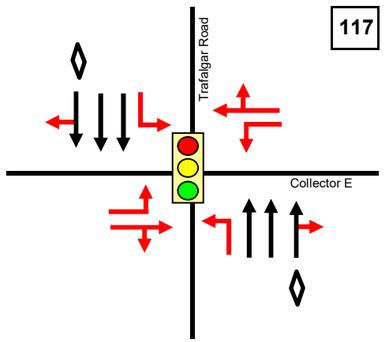












Legend

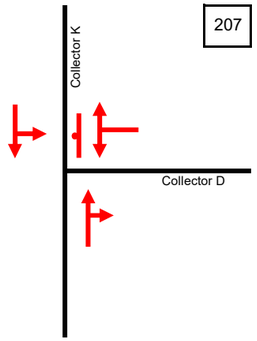
Signalized Intersection | Unsignalized Intersection | Existing / Planned Lane | Proposed Lane | HOV Lane

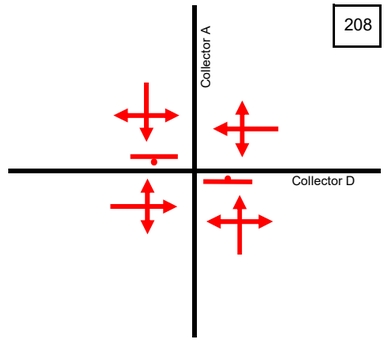
TYLin

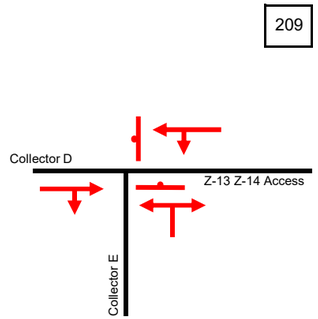
Figure 5-16b

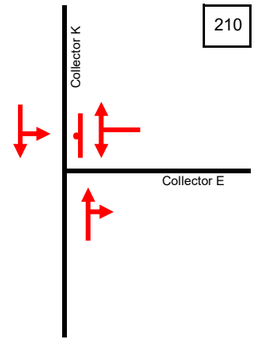
2031 Future Total Lane Configurations
Arterial-Collector Intersections

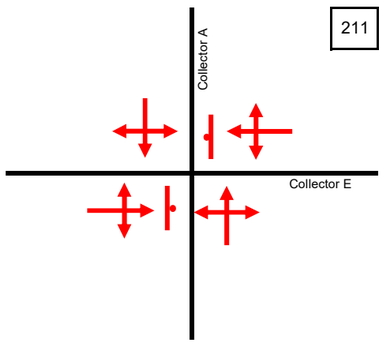
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

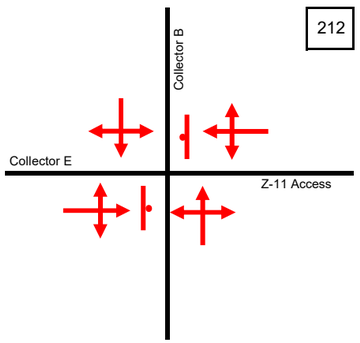


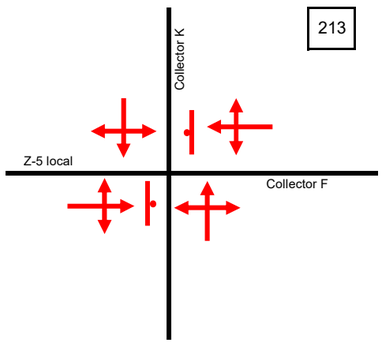


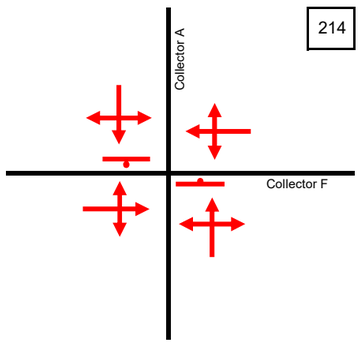


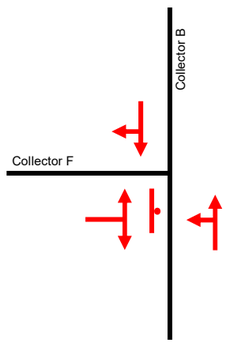


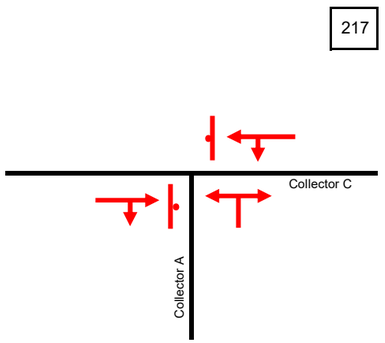












Legend

Unsignalized Intersection

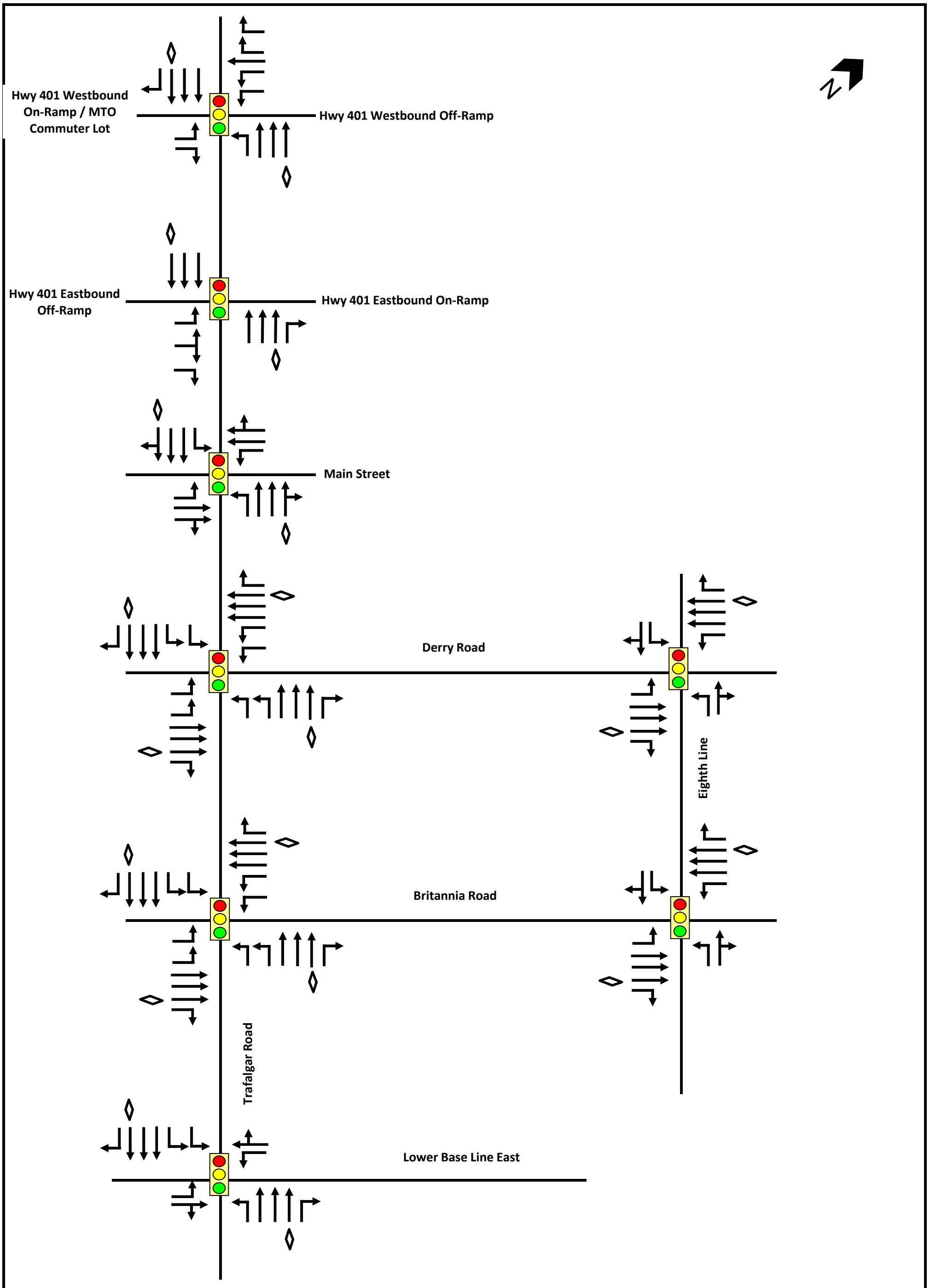
Existing / Planned Lane

Proposed Lane

TYLin

Figure 5-16c

2031 Future Total Lane Configurations
Collector-Collector Intersections



Legend

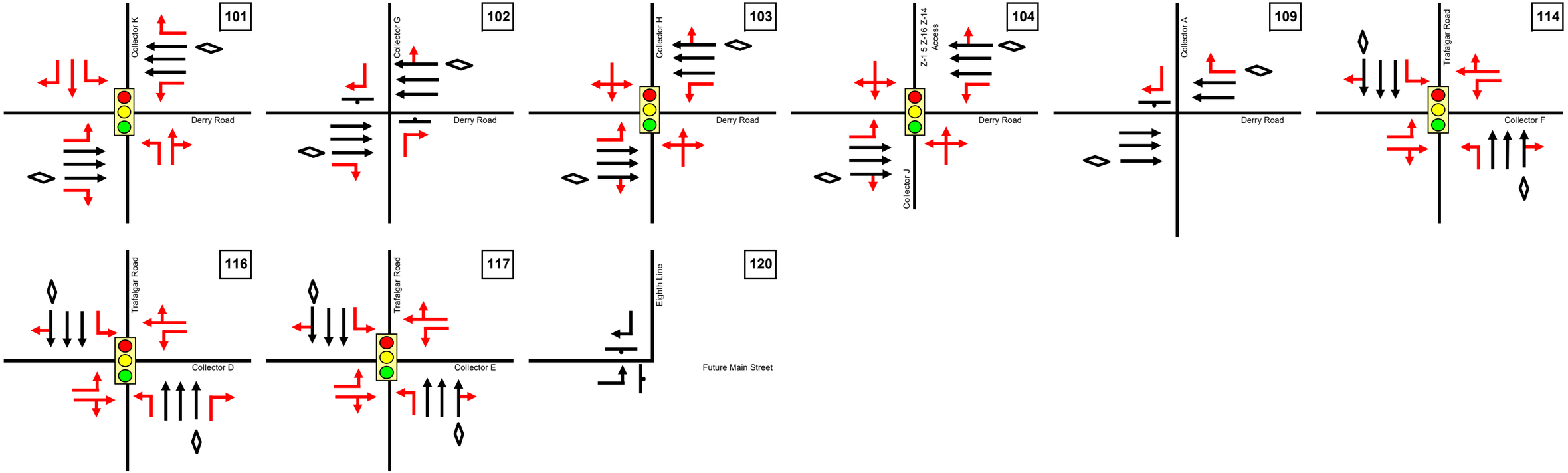
Signalized Intersection | Unsignalized Intersection | Lane | Proposed Lane | HOV Lane

TYLin

Figure 5-17a

2041 Future Total Lane Configuration
External Intersections

FUTURE ARTERIAL-COLLECTOR INTERSECTIONS



Legend

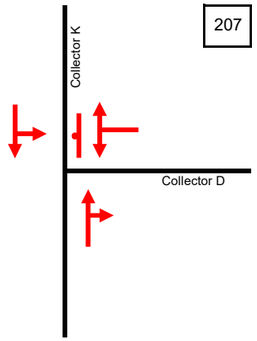
Signalized Intersection | Unsignalized Intersection | Existing / Planned Lane | Proposed Lane | HOV Lane

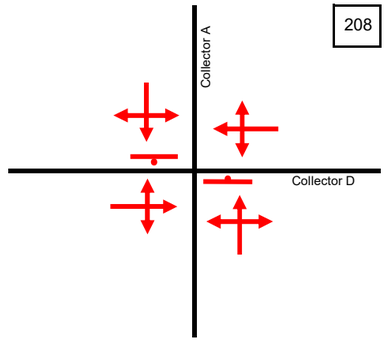
TYLin

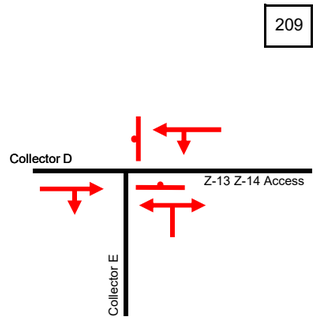
Figure 5-17b

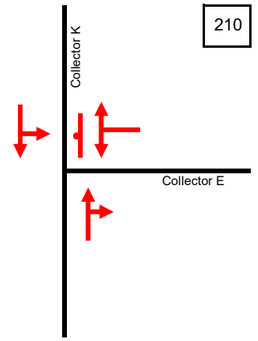
2041 Future Total Lane Configurations
Arterial-Collector Intersections

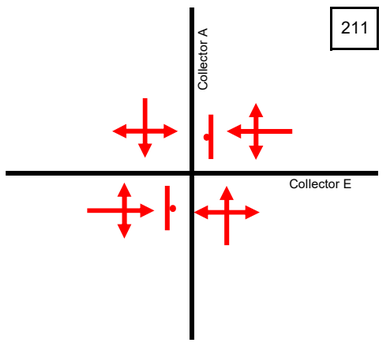
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

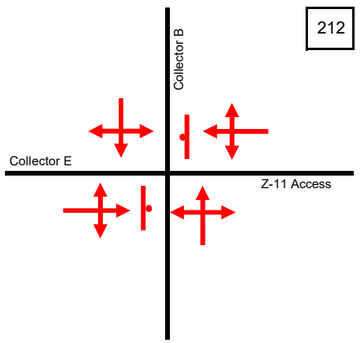


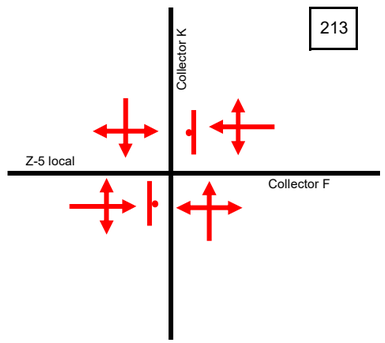


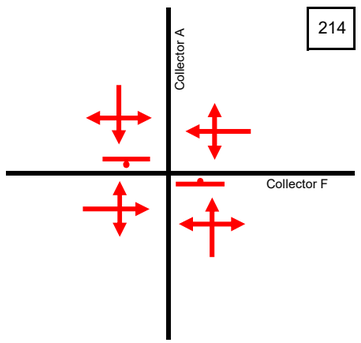


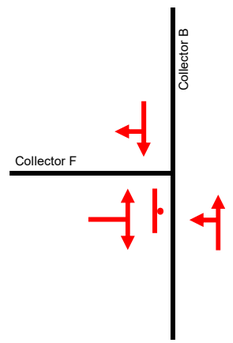


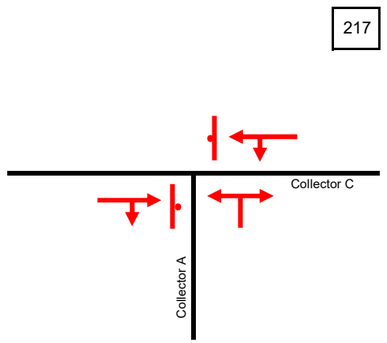












Legend

Unsignalized Intersection

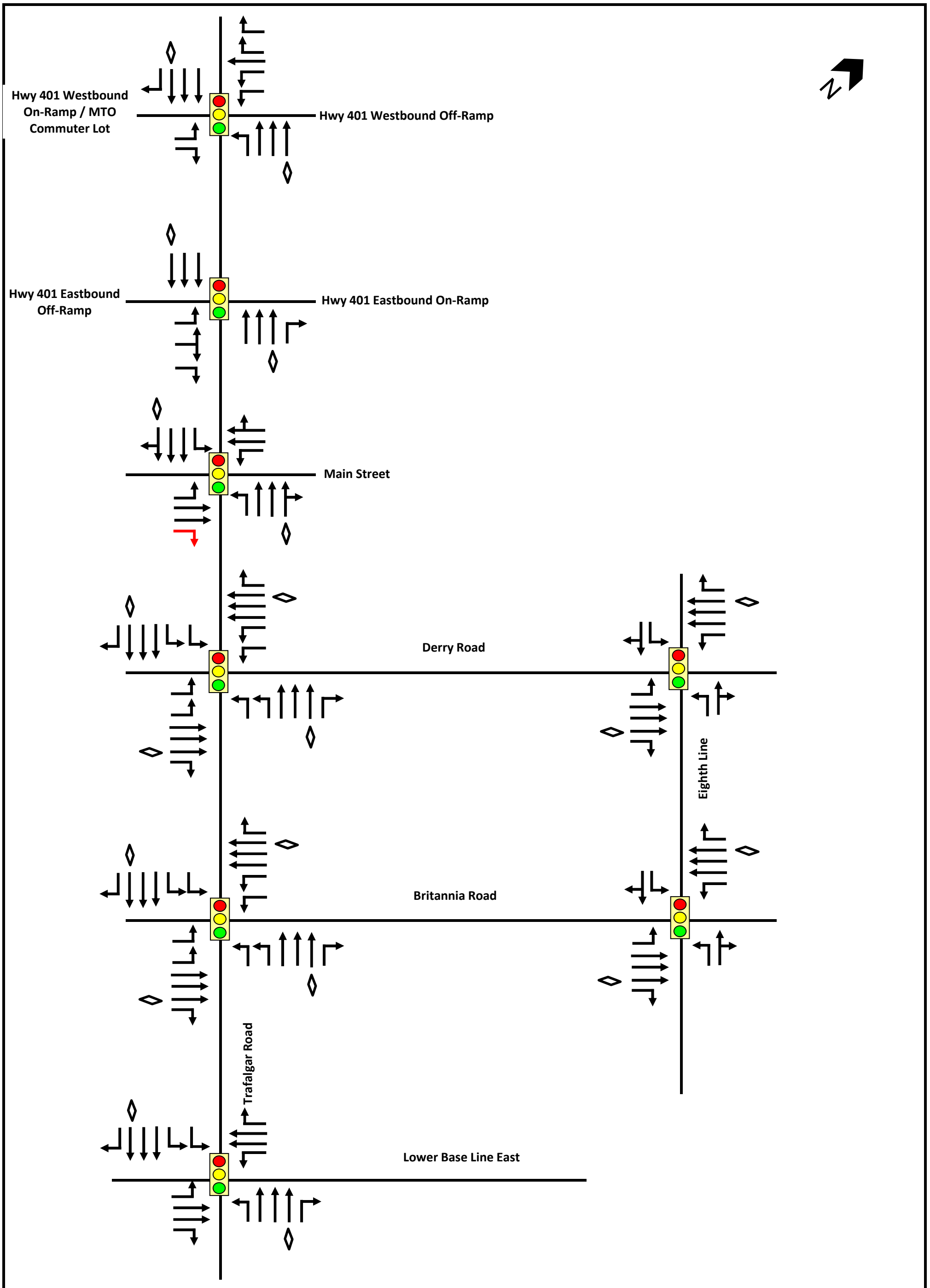
Existing / Planned Lane

Proposed Lane

TYLin

Figure 5-17c

2041 Future Total Lane Configurations
Collector-Collector Intersections



Legend

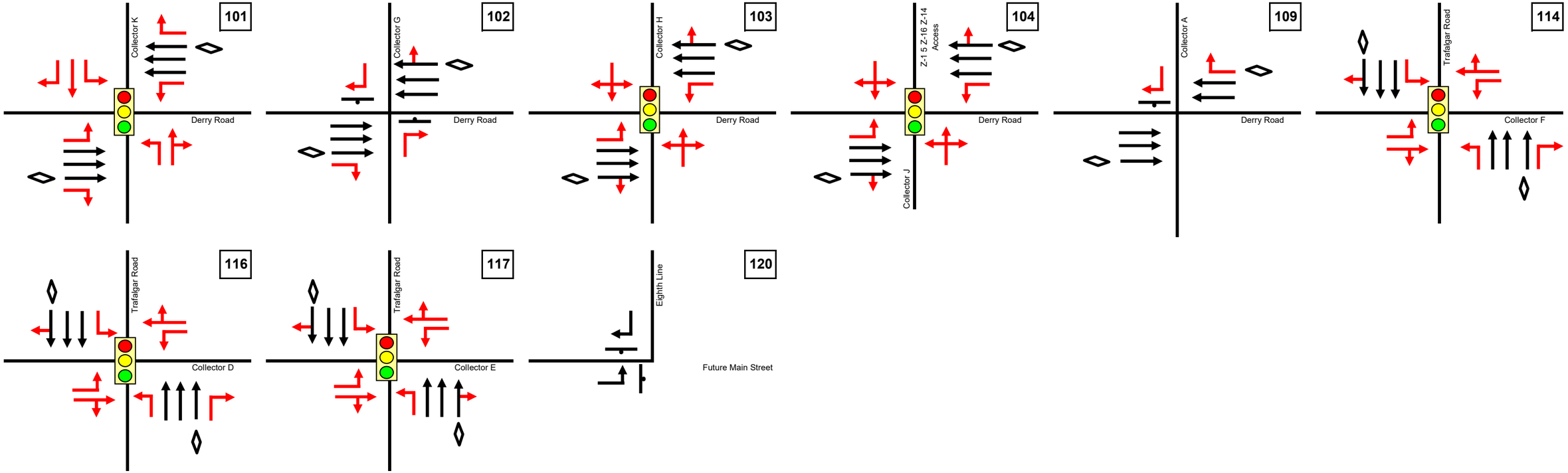
Signalized Intersection | Unsignalized Intersection | Lane | Proposed Lane | HOV Lane

TYLin

Figure 5-18a

2051 Future Total Lane Configuration
External Intersections

FUTURE ARTERIAL-COLLECTOR INTERSECTIONS



Legend

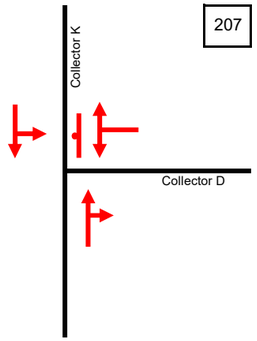
Signalized Intersection | Unsignalized Intersection | Existing / Planned Lane | Proposed Lane | HOV Lane

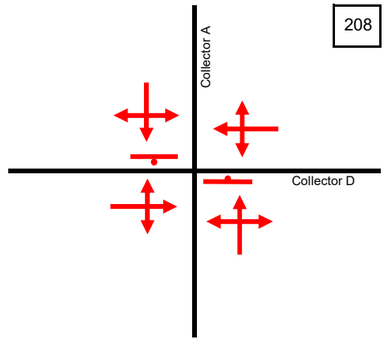
TYLin

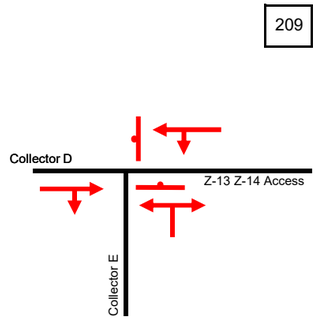
Figure 5-18b

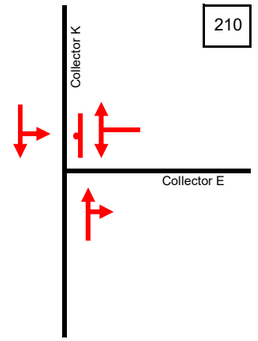
2051 Future Total Lane Configurations
Arterial-Collector Intersections

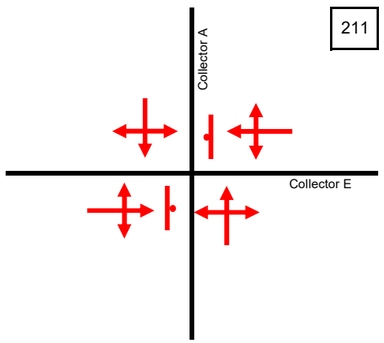
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

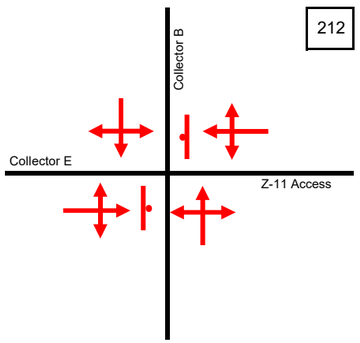


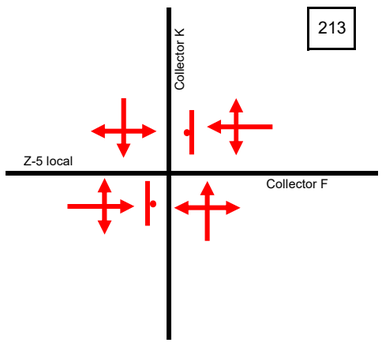


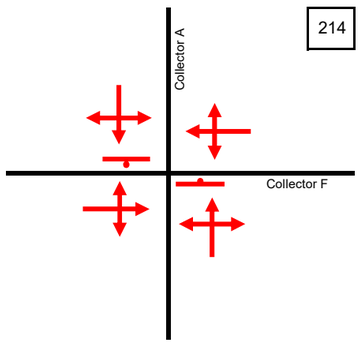


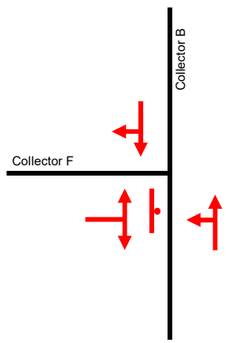


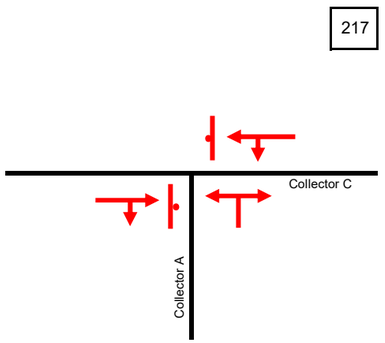












Legend

Unsignalized Intersection

Existing / Planned Lane

Proposed Lane

TYLin

Figure 5-18c

2051 Future Total Lane Configurations
Collector-Collector Intersections

5.2 2031 Future Total – Intersection Capacity Analysis

5.2.1 2031 Future Total – Without GO

The following tables in this section summarize the Synchro/HCM capacity and queuing results for the study intersections during the weekday a.m. and p.m. peak hours under future total conditions for the 2031 horizon without the GO Station.

The capacity results for the external and collector-to-arterial intersections during the weekday a.m. and p.m. peak hours under 2031 future total analysis without the GO Station are summarized in **Table 5-2** and **Table 5-3** respectively. Detailed Synchro reports are attached in **Appendix I.**

Table 5-2 2031 Future Total Capacity Analysis Summary: External Intersections

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	**0.99**	*58*	*E*	**0.98**	*60*	*E*
	EBL	**1.02**	**98**	**F**	**1.06**	**157**	**F**
	EBT	**0.90**	40	D	0.61	43	D
	EBR	0.38	31	C	0.12	26	C
	WBL	**1.08**	**115**	**F**	**0.99**	**97**	**F**
	WBT	0.50	47	D	**1.03**	67	E
	WBR	0.20	48	D	0.06	79	E
	NBL	0.73	**96**	**F**	**1.08**	**109**	**F**
	NBT	**0.95**	55	E	0.81	35	C
	NBR	0.30	40	D	0.18	43	D
	SBL	0.64	67	E	0.82	**81**	**F**
	SBT	0.80	49	D	0.75	48	D
	SBR	0.09	**83**	**F**	0.79	58	E
Eighth Line & Derry Road	*Overall*	*0.48*	*12*	*B*	*0.53*	*7*	*A*
	EBL	0.13	4	A	0.07	6	A
	EBT	0.48	14	B	0.27	9	A
	EBR	0.06	6	A	0.05	13	B
	WBL	0.33	5	A	0.14	3	A
	WBT	0.26	3	A	0.51	4	A
	WBR	0.01	2	A	0.00	2	A
	NBL	0.54	55	D	0.53	35	D
	NBTR	0.17	55	D	0.10	5	A
	SBL	0.08	59	E	0.12	59	E
	SBTR	0.05	58	E	0.15	59	E
Trafalgar Road & Britannia Road	*Overall*	**0.84**	*51*	*D*	**0.93**	*55*	*D*
	EBL	**0.91**	**85**	**F**	**1.00**	**120**	**F**
	EBT	0.67	50	D	0.51	47	D

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	EBR	0.71	55	E	0.12	42	D
	WBL	0.73	64	E	0.55	67	E
	WBT	0.39	47	D	0.76	45	D
	WBR	0.06	**252**	**F**	0.08	33	C
	NBL	0.72	61	E	**0.99**	63	E
	NBT	0.61	41	D	0.71	53	D
	NBR	0.16	75	E	0.14	76	E
	SBL	0.44	17	B	0.65	59	E
	SBT	**0.89**	36	D	**1.00**	58	E
	SBR	0.18	39	D	0.70	30	C
Eighth Line & Britannia Road	*Overall*	*0.36*	*23*	*C*	*0.36*	*15*	*B*
	EBL	0.04	17	B	0.05	5	A
	EBT	0.31	24	C	0.24	4	A
	EBR	0.01	6	A	0.01	6	A
	WBL	0.07	10	B	0.06	9	A
	WBT	0.20	11	B	0.33	11	B
	WBR	0.03	10	A	0.02	8	A
	NBL	0.11	57	E	0.21	52	D
	NBTR	0.49	60	E	0.52	55	D
	SBL	0.18	38	D	0.22	57	E
	SBTR	0.28	39	D	0.27	59	E
Trafalgar Road & Lower Base Line	*Overall*	***1.03***	*61*	*E*	***1.01***	*64*	*E*
	EBL	0.47	40	D	0.35	41	D
	EBTR	**0.99**	**99**	**F**	0.50	46	D
	WBL	**0.95**	**103**	**F**	0.54	41	D
	WBTR	0.61	55	D	**1.01**	**88**	**F**
	NBL	0.39	30	C	**0.94**	**85**	**F**
	NBT	**0.95**	57	E	**1.01**	64	E
	NBR	0.20	31	C	0.29	27	C
	SBL	**1.03**	**84**	**F**	**1.05**	**119**	**F**
	SBT	0.83	51	D	0.85	59	E
	SBR	0.05	**96**	**F**	0.04	25	C
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.50*	*22*	*C*	*0.87*	*44*	*D*
	EBL	<0.01	0	A	0.30	65	E
	EBR	0.00	66	E	0.01	61	E
	WBL	0.76	64	E	0.43	24	C
	WBT	0.02	51	D	0.03	19	B
	WBR	0.11	51	D	**0.96**	50	D
	NBL	0.05	8	A	0.06	34	C

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBT	0.23	8	A	0.75	46	D
	SBT	0.46	13	B	0.75	50	D
	SBR	0.09	10	A	0.03	37	D
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.50*	*15*	*B*	*0.53*	*14*	*B*
	EBL	0.52	28	C	0.54	29	C
	EBR	0.71	36	D	0.70	36	D
	NBT	0.41	9	A	0.47	9	A
	SBT	0.33	8	A	0.44	9	A
Trafalgar Road & Main Street	*Overall*	*0.57*	*9*	*A*	*0.49*	*13*	*B*
	WBL	0.38	66	E	0.68	68	E
	WBR	0.01	62	E	0.02	55	D
	NBTR	0.55	13	B	0.41	18	B
	SBL	0.23	8	A	0.07	2	A
	SBT	0.33	2	A	0.45	3	A

Under 2031 future total conditions, the intersections of Trafalgar Road and Lower Base Line operates with overall v/c ratios above 1.0 and Trafalgar Road and Derry Road approach capacity during both assessed peak hours. At Trafalgar Road and Britannia Road select movements exhibit operational capacity constraints. All other external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours.

At the intersection of Trafalgar Road and Derry Road, the westbound left movement is expected to operate beyond the theoretical capacity under the a.m. peak hour. Under the p.m. peak hour, the westbound left, westbound through, northbound left, and southbound right movements are expected to operate beyond the theoretical capacity.

At the intersection of Trafalgar Road at Britannia Road, the eastbound left, northbound left, and southbound through movements are expected to operate beyond the theoretical capacity during the p.m. peak hour.

At the intersection of Trafalgar Road and Lower Base Line, the westbound left, northbound through, and southbound left-turn movements are projected to operate at a v/c ratio over 1.0 during one or both peak hours. These operations are consistent with 2031 future background conditions without the addition of site traffic.

The 2031 future total conditions without the GO Station is expected to experience an increase in movements that are predicted to be over capacity at the external intersections. This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the 2031 future total traffic conditions without the operation of the future GO Station, forcing

residents and visitors to be auto dependent. It is recommended that the intersections be monitored to determine if the forecasted volumes will be realized in the future, especially if the future GO Station is not operable by then. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the broader Regional and Town road networks, existing traffic may relocate to alternative routes.

Table 5-3 2031 Future Total Capacity Analysis Summary: Arterial-Collector Intersections

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Derry Road & Collector K	*Overall*	*0.86*	*32*	*C*	*0.75*	*8*	*A*
	EBL	0.16	12	B	0.62	36	D
	EBT	**0.97**	37	D	0.32	5	A
	EBR	0.02	11	B	0.06	4	A
	WBL	<0.01	0	A	<0.01	0	A
	WBTR	0.37	16	B	0.82	7	A
	NBL	0.39	38	D	0.39	56	E
	NBTR	<0.01	0	A	<0.01	0	A
	SBL	0.21	54	D	0.05	52	D
	SBT	<0.01	0	A	<0.01	0	A
	SBR	0.02	51	D	0.00	51	D
Derry Road & Collector G/Z-10 Local	EBT	0.38	0	A	0.21	0	A
	EBR	0.03	0	A	0.13	0	A
	WBTR	0.24	0	A	0.25	0	A
	NBR	0.03	10	A	0.10	9	A
	SBR	0.07	10	A	0.03	9	A
Derry Road & Collector H	*Overall*	*0.65*	*18*	*B*	*0.79*	*9*	*A*
	EBL	0.35	13	B	0.80	67	E
	EBTR	0.60	18	B	0.32	2	A
	WBL	0.20	10	A	0.10	3	A
	WBTR	0.32	5	A	0.57	6	A
	NBLTR	0.82	70	E	0.72	75	E
	SBLTR	0.07	41	D	0.37	55	D
Derry Road & Collector J/Z-15 Access	*Overall*	*0.70*	*18*	*B*	*0.62*	*12*	*B*
	EBL	0.35	12	B	0.37	21	C
	EBTR	0.63	13	B	0.36	7	A
	WBL	0.13	12	B	0.07	4	A
	WBTR	0.35	10	B	0.58	7	A
	NBLTR	**0.86**	68	E	0.83	**85**	**F**
	SBLTR	0.03	38	D	0.36	54	D
	EBT	0.54	0	A	0.22	0	A

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Derry Road & Collector A	WBT	0.24	0	A	0.76	0	A
	WBR	<0.01	0	A	0.01	0	A
	SBR	0.07	10	A	0.05	14	B
Trafalgar Road & Collector F	*Overall*	*0.68*	*14*	*B*	*0.52*	7	*A*
	EBL	**0.84**	**111**	**F**	0.20	61	E
	EBTR	0.52	61	E	0.35	62	E
	WBL	0.74	**86**	**F**	0.32	65	E
	WBTR	0.65	67	E	0.32	65	E
	NBL	0.18	2	A	0.28	20	C
	NBTR	0.67	8	A	0.43	1	A
	SBL	0.47	27	C	0.32	6	A
	SBTR	0.42	4	A	0.54	5	A
Trafalgar Road & Collector D	*Overall*	*0.75*	*16*	*B*	*0.64*	*16*	*B*
	EBL	0.74	73	E	0.34	53	D
	EBTR	0.16	53	D	0.11	49	D
	WBL	0.43	57	E	0.78	73	E
	WBTR	0.08	52	D	0.20	50	D
	NBL	0.28	3	A	0.53	39	D
	NBTR	0.80	10	B	0.42	3	A
	SBL	0.57	48	D	0.30	7	A
	SBTR	0.41	8	A	0.62	13	B
Trafalgar Road & Collector E	*Overall*	*0.61*	*6*	*A*	*0.54*	6	*A*
	EBL	0.29	64	E	0.03	59	E
	EBTR	0.04	61	E	0.03	58	E
	WBL	0.52	68	E	0.56	66	E
	WBTR	0.06	62	E	0.06	58	E
	NBL	0.04	3	A	0.13	1	A
	NBTR	0.64	4	A	0.39	1	A
	SBL	0.34	22	C	0.12	4	A
	SBTR	0.38	4	A	0.55	5	A
Main Street & Eighth Line	EBL	0.06	7	A	0.02	7	A
	SBR	0.01	7	A	0.04	7	A

Under 2031 future total conditions, all the arterial-to-collector intersections operate well with overall reserve capacity and no individual movements over capacity. Although some movements experience LOS F, the v/c ratio is less than 1.0 during both peak hours, indicating some reserve capacity remains.

5.3 2041 Future Total – Intersection Capacity Analysis

5.3.1 2041 Future Total – Without GO

The signal timing modifications applied under 2041 future background conditions were carried forward and applied to 2041 future total conditions and optimized to accommodate the addition of site traffic. In addition to optimizing signal timing plans under 2041 future total conditions without the GO Station, a dedicated northbound right-turn lane is recommended at the intersection of Trafalgar Road and Collector D and dedicated eastbound right and westbound right-turn lanes are recommended at the intersection of Derry Road and Collector K. These geometric recommendations have been incorporated into the analysis. The capacity results for the external and collector-to-arterial intersections during the weekday a.m. and p.m. peak hours under 2041 future total analysis without the GO Station are summarized in **Table 5-4** and **Table 5-5**, respectively. Detailed Synchro reports are attached in **Appendix I.**

Table 5-4 2041 Future Total Capacity Analysis Summary – Without GO: External Intersections

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	**1.13**	**90**	**F**	**1.14**	**97**	**F**
	EBL	**1.12**	**128**	**F**	0.67	80	E
	EBT	**0.98**	51	D	0.61	37	D
	EBR	0.50	43	D	0.24	25	C
	WBL	**1.14**	**154**	**F**	0.78	64	E
	WBT	0.58	49	D	**1.09**	**90**	**F**
	WBR	0.34	50	D	0.08	45	D
	NBL	**0.89**	**106**	**F**	**1.26**	**182**	**F**
	NBT	**1.24**	**153**	**F**	**1.21**	**128**	**F**
	NBR	0.45	41	D	0.29	22	C
	SBL	0.78	76	E	**1.05**	**129**	**F**
	SBT	**1.01**	70	E	**1.15**	**135**	**F**
	SBR	0.09	72	E	0.70	47	D
Eighth Line & Derry Road	*Overall*	*0.61*	*19*	*B*	*0.66*	*14*	*B*
	EBL	0.21	10	B	0.19	14	B
	EBT	0.64	22	C	0.36	13	B
	EBR	0.08	15	B	0.07	16	B
	WBL	0.51	18	B	0.22	6	A
	WBT	0.34	7	A	0.66	11	B
	WBR	0.01	5	A	0.00	5	A
	NBL	0.45	51	D	0.61	49	D
	NBTR	0.17	76	E	0.12	46	D

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	SBL	0.12	61	E	0.10	48	D
	SBTR	0.10	62	E	0.11	48	D
Trafalgar Road & Britannia Road	*Overall*	**1.00**	*62*	*E*	**0.95**	*53*	*D*
	EBL	**1.12**	**139**	**F**	**1.15**	**159**	**F**
	EBT	0.72	46	D	0.59	45	D
	EBR	0.89	67	E	0.16	39	D
	WBL	0.73	60	E	0.57	65	E
	WBT	0.36	45	D	0.82	44	D
	WBR	0.08	**130**	**F**	0.17	27	C
	NBL	0.86	65	E	0.94	58	E
	NBT	0.82	50	D	**0.88**	53	D
	NBR	0.21	67	E	0.17	62	E
	SBL	0.58	71	E	0.63	**99**	**F**
	SBT	**1.04**	59	E	**1.04**	48	D
	SBR	0.26	51	D	0.80	18	B
Eighth Line & Britannia Road	*Overall*	*0.44*	*28*	*C*	*0.44*	*17*	*B*
	EBL	0.07	20	C	0.08	8	A
	EBT	0.38	30	C	0.30	7	A
	EBR	0.01	7	A	0.01	7	A
	WBL	0.11	12	B	0.09	10	B
	WBT	0.25	13	B	0.41	13	B
	WBR	0.04	11	B	0.03	9	A
	NBL	0.13	66	E	0.25	55	E
	NBTR	0.62	75	E	0.63	60	E
	SBL	0.25	41	D	0.31	50	D
	SBTR	0.34	41	D	0.35	53	D
Trafalgar Road & Lower Base Line	*Overall*	1.16	*83*	*F*	**1.21**	***122***	***F***
	EBL	0.74	60	E	0.55	45	D
	EBTR	**1.17**	**149**	**F**	075	54	D
	WBL	**1.23**	**175**	**F**	0.79	55	E
	WBTR	0.52	43	D	**1.23**	**176**	**F**
	NBL	**0.94**	**153**	**F**	**1.19**	**165**	**F**
	NBT	**1.04**	77	E	**1.16**	**121**	**F**
	NBR	0.22	30	C	0.34	29	C
	SBL	**1.22**	**161**	**F**	**1.23**	**173**	**F**
	SBT	**0.95**	53	D	**1.05**	**95**	**F**
	SBR	0.08	42	D	0.05	**937**	**F**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.56*	*23*	*C*	**0.90**	*49*	*D*
	EBL	<0.01	0	A	0.30	65	E
	EBR	0.00	66	E	0.01	61	E

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	WBL	0.79	63	E	0.50	26	C
	WBT	0.02	48	D	0.03	21	C
	WBR	0.11	49	D	**1.02**	68	E
	NBL	0.07	9.5	A	0.08	32	C
	NBT	0.28	10	A	0.75	43	D
	SBT	0.52	16	B	0.77	48	D
	SBR	0.09	11	B	0.03	34	C
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.66*	*18*	*C*	*0.65*	*16*	*B*
	EBL	0.52	24	C	0.55	27	C
	EBR	**0.82**	39	D	0.80	40	D
	NBT	0.57	14	B	0.58	12	B
	SBT	0.44	12	B	0.54	12	B
Trafalgar Road & Main Street	*Overall*	*0.80*	*37*	*D*	***1.21***	***99***	***F***
	EBL	0.55	58	E	0.57	52	D
	EBTR	0.43	60	E	**1.14**	64	E
	WBL	0.60	66	E	**1.56**	**337**	**F**
	WBTR	0.39	61	E	0.33	53	D
	NBL	0.81	26	C	**0.86**	**59**	**E**
	NBTR	0.82	38	D	0.63	26	C
	SBL	0.59	35	D	0.51	25	C
	SBTR	0.73	27	C	**1.23**	**152**	**F**

Under 2041 future total conditions, most external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours. The intersections of Trafalgar Road at Derry Road, Britannia Road and Lower Base Line overall are approaching or above capacity during the a.m. and p.m. with multiple select movements exhibiting capacity deficiency.

At the intersection of Trafalgar Road and Derry Road, the eastbound left, westbound left, northbound through, and southbound through movements are expected to operate beyond the theoretical capacity under the a.m. peak hour. Under the p.m. peak hour, the westbound through, northbound left, northbound through, southbound left, southbound through, and southbound left movements are expected to operate beyond the theoretical capacity.

At the intersection of Trafalgar Road at Britannia Road, the eastbound left and southbound through movements are expected to operate beyond capacity during the a.m. peak hour. During the p.m. peak hour, the eastbound left, northbound left, and southbound through movements are expected to operate beyond the theoretical capacity during the p.m. peak hour.

At the intersection of Trafalgar Road and Lower Base Line, most movements are projected to operate at a v/c ratio over 1.0 during one or both peak hours, some by significant margins. These

poor operations are projected to be exacerbated with the addition of site traffic, but are present under future background conditions.

With the addition of site traffic, the intersection of Trafalgar Road and Main Street is projected to have several movements operating above v/c ratios of 1.0, including the eastbound through, westbound left, and southbound through movements during the evening peak hour.

The 2041 future total conditions without the GO Station is expected to experience an increase in movements that are predicted to be over capacity at the external intersections. This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the 2041 future total traffic conditions without the operation of the future GO Station, forcing residents and visitors to be auto dependent. It is recommended that the intersections be monitored to determine if the forecasted volumes will be realized in the future, especially if the future GO Station is not operable by then. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the broader Regional and Town road networks, existing traffic may relocate to alternative routes.

Table 5-5 2041 Future Total Capacity Analysis Summary – Without GO: Arterial-Collector Intersections

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Derry Road & Collector K	*Overall*	**1.09**	*45*	*D*	**0.96**	*16*	*B*
	EBL	0.14	8	A	0.59	51	D
	EBT	**1.06**	55	D	0.38	5	A
	EBR	0.05	7	A	0.14	4	A
	WBL	0.13	8	A	0.10	3	A
	WBT	0.37	4	A	**0.98**	17	B
	WBR	0.01	10	B	0.01	6	A
	NBL	**0.98**	**98**	**F**	**0.87**	**94**	**F**
	NBTR	0.01	43	D	0.00	54	D
	SBL	0.23	45	D	0.10	55	D
	SBT	<0.01	0	A	<0.01	0	A
	SBR	0.02	43	D	0.01	54	D
Derry Road & Collector G/Z-10 Local	EBT	0.44	0	A	0.25	0	A
	EBR	0.03	0	A	0.57	0	A
	WBTR	0.29	0	A	0.29	0	A
	NBR	0.03	11	B	0.10	9	A
	SBR	0.1	10	A	0.06	10	A
Derry Road & Collector H	*Overall*	*0.71*	*13*	*B*	*0.69*	*12*	*B*
	EBL	0.53	11	B	0.50	29	C
	EBTR	0.69	10	B	0.37	6	A

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	WBL	0.28	17	B	0.13	7	A
	WBTR	0.38	6	A	0.71	10	A
	NBLTR	0.78	65	E	0.61	70	E
	SBLTR	0.10	40	D	0.28	57	E
Derry Road & Collector J/Z-15 Access	*Overall*	*0.77*	*18*	*B*	*0.71*	*13*	*B*
	EBL	0.57	18	B	0.67	63	E
	EBTR	0.73	14	B	0.42	7	A
	WBL	0.17	15	B	0.10	6	A
	WBTR	0.42	11	B	0.67	8	A
	NBLTR	**0.87**	70	E	**0.87**	**93**	**F**
	SBLTR	0.04	39	D	0.46	54	D
Derry Road & Collector A	EBT	0.66	0	A	0.27	0	A
	WBT	0.29	0	A	**0.94**	0	A
	WBR	0.01	0	A	0.02	0	A
	SBR	0.08	10	B	0.10	22	C
Trafalgar Road & Collector F	*Overall*	**0.98**	*44*	*D*	*0.65*	*14*	*B*
	EBL	**1.02**	**139**	**F**	0.52	68	E
	EBTR	0.34	46	D	0.44	62	E
	WBL	0.70	68	E	0.48	64	E
	WBTR	0.76	70	E	0.50	63	E
	NBL	0.37	18	B	0.51	27	C
	NBTR	**0.99**	53	D	0.55	12	B
	SBL	0.63	55	D	0.55	26	C
	SBTR	0.58	15	B	0.67	7	A
Trafalgar Road & Collector D	*Overall*	**1.01**	*42*	*D*	**0.87**	*33*	*C*
	EBL	**0.97**	**98**	**F**	0.75	74	E
	EBTR	0.39	46	D	0.12	44	D
	WBL	0.44	48	D	**0.86**	78	E
	WBTR	0.09	42	D	0.41	47	D
	NBL	0.58	26	C	0.80	**93**	**F**
	NBT	**1.03**	47	D	0.52	4	A
	NBR	0.15	8	A	0.03	2	A
	SBL	**1.01**	**113**	**F**	0.50	20	B
	SBTR	0.59	18	B	**0.89**	38	D
Trafalgar Road & Collector E	*Overall*	*0.75*	*13*	*B*	*0.66*	*8*	*A*
	EBL	0.42	63	E	0.05	58	E
	EBTR	0.04	59	E	0.05	56	E
	WBL	0.49	64	E	0.61	67	E
	WBTR	0.07	59	E	0.09	55	D
	NBL	0.08	6	A	0.34	37	D

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBTR	0.79	12	B	0.47	2	A
	SBL	0.55	39	D	0.27	6	A
	SBTR	0.47	7	A	0.67	7	A
Main Street & Eighth Line	EBL	0.29	9	A	0.29	10	A
	SBR	0.19	8	A	0.23	8	A

Under 2041 future total conditions, most movements at the arterial-to-collector intersections are projected to operate well with overall reserve capacity. Select movements at the intersections of Derry Road at Collector K, Trafalgar Road at Collector F and Trafalgar Road at Collector D are projected to operate over capacity.

At the intersection of Derry Road at Collector K, the eastbound through movement is projected to operate beyond the theoretical capacity with a v/c ratio of 1.06 under the a.m. peak hour.

At the intersection of Trafalgar Road at Collector F, the eastbound left movement is projected to operate beyond the theoretical capacity with a v/c ratio of 1.02 under the a.m. peak hour, with the northbound through-right movement approaching capacity with a v/c ratio of 0.99.

At the intersection of Trafalgar Road at Collector D, the northbound through and southbound left movements are expected to operate beyond the theoretical capacity with v/c ratio of 1.03 and 1.01 under the a.m. peak hour, respectively. These movements are on the collector roads and experience the delay due to the 140 second cycle length of the intersection and the signal timing plans favouring the higher volume arterial road. Additionally, the results present a more conservative assessment as it does not consider the operation of the future GO Station to be in effect, forcing residents and visitors to be auto dependent.

5.3.2 2041 Future Total – With GO

The signal timing modifications and geometric recommendations under the 2041 future total conditions without the GO Station have been carried forward and applied to 2041 future total conditions with the GO Station. The signal timings have been optimized under the 2041 future total conditions with the GO Station. The capacity results for the external and collector-to-arterial intersections during the weekday a.m. and p.m. peak hours under 2041 future total analysis without the GO Station are summarized in **Table 5-6** and **Table 5-7**, respectively. Detailed Synchro reports are attached in **Appendix I.**

Table 5-6 2041 Future Total Capacity Analysis Summary – With GO: External Intersections

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	**1.09**	*77*	*E*	**1.12**	**86**	**F**
	EBL	**1.11**	**124**	**F**	0.66	80	E
	EBT	**0.99**	51	D	0.61	37	D
	EBR	0.49	43	D	0.24	25	C
	WBL	**1.10**	**142**	**F**	0.75	63	E
	WBT	0.57	46	D	**1.10**	**92**	**F**
	WBR	0.32	45	D	0.07	44	D
	NBL	**0.89**	**110**	**F**	**1.26**	**184**	**F**
	NBT	**1.12**	**102**	**F**	**1.16**	**104**	**F**
	NBR	0.40	37	D	0.28	24	C
	SBL	0.77	66	E	**1.01**	**117**	**F**
	SBT	**0.97**	64	E	**1.09**	**105**	**F**
	SBR	0.09	**92**	**F**	0.70	49	D
Eighth Line & Derry Road	*Overall*	*0.60*	*20*	*C*	*0.65*	*14*	*B*
	EBL	0.19	11	B	0.19	15	B
	EBT	0.64	23	C	0.36	15	B
	EBR	0.08	17	B	0.07	21	C
	WBL	0.51	18	B	0.22	6	A
	WBT	0.34	7	A	0.65	10	B
	WBR	0.01	5	A	0.00	5	A
	NBL	0.42	51	D	0.61	50	D
	NBTR	0.16	79	E	0.11	47	D
	SBL	0.12	61	E	0.10	48	D
	SBTR	0.09	62	E	0.10	48	D
Trafalgar Road & Britannia Road	*Overall*	**0.97**	*57*	*E*	**0.93**	*49*	*E*
	EBL	**0.98**	**98**	**F**	**1.03**	**121**	**F**
	EBT	0.72	46	D	0.59	45	D

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	EBR	0.89	67	E	0.16	39	D
	WBL	0.73	60	E	0.57	64	E
	WBT	0.36	45	D	0.82	44	D
	WBR	0.07	**148**	**F**	0.14	29	C
	NBL	0.86	67	E	0.94	59	E
	NBT	0.77	48	D	**0.86**	51	D
	NBR	0.20	73	E	0.17	62	E
	SBL	0.54	71	E	0.62	**99**	**F**
	SBT	**1.02**	53	D	**1.01**	40	D
	SBR	0.24	47	D	0.72	16	B
Eighth Line & Britannia Road	*Overall*	*0.44*	*28*	*C*	*0.44*	*17*	*B*
	EBL	0.06	20	B	0.08	8	A
	EBT	0.38	30	C	0.29	7	A
	EBR	0.01	7	A	0.01	7	A
	WBL	0.11	12	B	0.09	10	B
	WBT	0.24	12	B	0.40	13	B
	WBR	0.04	11	B	0.03	9	A
	NBL	0.13	67	E	0.25	55	E
	NBTR	0.61	75	E	0.61	60	E
	SBL	0.23	41	D	0.29	50	D
	SBTR	0.35	41	D	0.33	52	D
Trafalgar Road & Lower Base Line	*Overall*	**1.13**	***82***	***F***	**1.20**	***109***	***F***
	EBL	0.69	55	E	0.50	43	D
	EBTR	1.14	**137**	**F**	0.72	52	D
	WBL	**1.17**	**149**	**F**	0.77	54	D
	WBTR	0.48	40	D	**1.20**	**160**	**F**
	NBL	**0.94**	**154**	**F**	**1.19**	**165**	**F**
	NBT	**1.03**	75	E	**1.15**	**114**	**F**
	NBR	0.22	31	C	0.33	29	C
	SBL	**1.20**	**152**	**F**	**1.35**	**230**	**F**
	SBT	0.97	58	E	**1.04**	**95**	**F**
	SBR	0.07	46	D	0.05	27	C
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.54*	*23*	*C*	**0.90**	*48*	*D*
	EBL	<0.01	0	A	0.30	65	E
	EBR	0.00	66	E	0.01	61	E
	WBL	0.78	63	E	0.49	26	C
	WBT	0.02	49	D	0.03	21	C
	WBR	0.11	49	D	**1.00**	63	E
	NBL	0.06	9	A	0.08	33	C

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBT	0.27	10	A	0.76	44	D
	SBT	0.50	15	B	0.76	48	D
	SBR	0.09	11	B	0.03	35	C
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.62*	*17*	*B*	*0.64*	*16*	*B*
	EBL	0.53	26	C	0.55	27	C
	EBR	0.79	38	D	0.79	40	D
	NBT	0.53	12	B	0.57	12	B
	SBT	0.40	11	B	0.52	11	B
Trafalgar Road & Main Street	*Overall*	*0.87*	*43*	*D*	***1.19***	***92***	***F***
	EBL	0.74	**69**	**E**	**0.86**	**81**	**F**
	EBTR	0.37	55	D	**1.05**	**62**	**E**
	WBL	0.83	**86**	**F**	**1.40**	**261**	**F**
	WBTR	0.74	63	E	0.76	61	E
	NBL	**0.85**	33	C	**0.89**	**68**	**E**
	NBTR	**0.86**	45	D	0.65	26	C
	SBL	0.54	28	C	0.43	25	C
	SBTR	0.72	30	C	**1.21**	**146**	**F**

Under 2041 future total conditions with the GO Station, most external intersection movements are expected to operate with some reserve capacity and acceptable delays, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road, Britannia Road, and Lower Base Line that are expected to operate above theoretical capacity. Several intersections in the study area are expected to perform at a Level of Service (LOS) "E" or better, even with their maximum volume. For the intersection of Trafalgar Road at Lower Base Line, dual southbound left-turn lanes have been recommended under the p.m. peak hour and have been included in the 2041 Future Total conditions analysis for both peak hours to alleviate the congestion and delays experienced by the single southbound left-turn lane unable to find gaps due to the increased northbound through traffic. While these intersections may operate beyond theoretical capacity during peak hours, this is a typical scenario at the crossroads of two major arterials. Importantly, the traffic flow at these intersections is anticipated to return to manageable levels outside of peak periods.

In comparison to the 2041 future total conditions without the GO Station, the difference in results illustrate the impact a GO Station would have on the surrounding road network and the need for a GO Station to support the future intensification within the Agerton area under 2041. It is recommended that the intersections be monitored through the Draft Plan Traffic Impact Studies to determine if the forecasted volumes will be realized in the future. Also, as the road network

within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the network, existing traffic may relocate to alternative routes.

Highly relevant to the need and desire for intensification, is that a high-volume of 2041 background traffic on the regional roads is through-traffic. Desired intensification in this area should not be prevented by through-traffic on the regional roads which dominates the vehicle counts. Some priority in the modelling should be attributed to future local traffic, leaving the through traffic to either accept longer trip durations or choose a different route, mode or time of travel.

This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the 2041 and 2051 future total traffic conditions. It is recommended that the intersections be monitored to determine if the forecasted volumes will be realized in the future.

Table 5-7 2041 Future Total Capacity Analysis Summary – With GO: Arterial-Collector Intersections

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Derry Road & Collector K	*Overall*	**1.09**	*45*	*D*	**0.96**	*17*	*B*
	EBL	0.11	8	A	0.61	52	D
	EBT	**1.06**	55	D	0.38	5	A
	EBR	0.05	7	A	0.14	4	A
	WBL	0.13	8	A	0.10	3	A
	WBT	0.37	4	A	**0.99**	18	B
	WBR	0.01	10	A	0.01	6	A
	NBL	**0.98**	**98**	**F**	**0.87**	**94**	**F**
	NBTR	0.01	43	D	0.00	54	D
	SBL	0.21	45	D	0.10	55	D
	SBT	<0.01	0	A	<0.01	0	A
	SBR	0.02	43	D	0.01	54	D
Derry Road & Collector G/Z-10 Local	EBT	0.44	0	A	0.24	0	A
	EBR	0.03	0	A	0.13	0	A
	WBTR	0.28	0	A	0.57	0	A
	NBR	0.03	11	B	0.10	9	A
	SBR	0.09	10	A	0.05	10	A
Derry Road & Collector H	*Overall*	*0.71*	*14*	*B*	*0.68*	*11*	*B*
	EBL	0.48	10	A	0.47	29	C
	EBTR	0.69	11	B	0.36	6	A
	WBL	0.28	18	B	0.13	7	A
	WBTR	0.38	7	A	0.70	10	A

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	NBLTR	0.78	65	E	0.61	70	E
	SBLTR	0.09	41	D	0.28	56	E
Derry Road & Collector J/Z-15 Access	*Overall*	*0.77*	*18*	*B*	*0.70*	*13*	*B*
	EBL	0.52	16	B	0.62	56	E
	EBTR	0.72	14	B	0.42	6	A
	WBL	0.17	15	B	0.10	6	A
	WBTR	0.41	11	B	0.67	8	A
	NBLTR	**0.87**	70	E	**0.86**	**91**	**F**
	SBLTR	0.04	39	D	0.43	54	D
Derry Road & Collector A	EBT	0.66	0	A	0.27	0	A
	WBT	0.29	0	A	**0.94**	0	A
	WBR	0.01	0	A	0.02	0	A
	SBR	0.08	10	B	0.12	23	C
Trafalgar Road & Collector F	*Overall*	**0.89**	*37*	*D*	*0.63*	*11*	*B*
	EBL	0.92	**107**	**F**	0.57	72	E
	EBTR	0.33	46	D	0.42	62	E
	WBL	0.65	65	E	0.42	63	E
	WBTR	0.75	70	E	0.50	63	E
	NBL	0.25	15	B	0.49	22	C
	NBTR	**0.89**	41	D	0.50	8	A
	SBL	0.62	46	D	0.52	18	B
	SBTR	0.55	17	B	0.63	5	A
Trafalgar Road & Collector D	*Overall*	**0.98**	*34*	*C*	*0.83*	*30*	*C*
	EBL	**0.95**	**92**	**F**	**0.95**	**129**	**F**
	EBTR	0.40	46	D	0.12	46	D
	WBL	0.37	46	D	0.85	79	E
	WBTR	0.09	42	D	0.40	50	D
	NBL	0.35	10	B	0.75	**84**	**F**
	NBT	**1.00**	32	C	0.49	3	A
	NBR	0.13	8	A	0.03	1	A
	SBL	**0.96**	**101**	**F**	0.47	21	C
	SBTR	0.52	16	B	0.80	32	C
Trafalgar Road & Collector E	*Overall*	*0.71*	*11*	*B*	*0.63*	*7*	*A*
	EBL	0.55	70	E	0.07	58	E
	EBTR	0.04	61	E	0.05	58	E
	WBL	0.55	70	E	0.58	66	E
	WBTR	0.07	61	E	0.08	56	E
	NBL	0.05	5	A	0.31	41	D
	NBTR	0.73	9	A	0.46	2	A
	SBL	0.52	29	C	0.28	5	A

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	SBTR	0.43	7	A	0.64	6	A
Main Street & Eighth Line	EBL	0.37	11	B	0.36	11	B
	SBR	0.53	12	B	0.54	12	B

Overall, most of the arterial-to-collector intersection movements are expected to operate with reserve capacity, with most movements experiencing an LOS of 'E' or better under 2041 future total conditions. Some individual movements experience LOS 'F', however, these movements typically operate with reserve capacity. The higher delays (LOS 'E' and 'F') are due in part to relatively long cycle lengths of 140 seconds implemented along the Reginal corridors which inherently add delay to dedicated turning movements and vehicles on the minor approaches. Although the intersection of Derry Road & Collector K is expected to operate beyond capacity during the a.m. peak hour and approaching capacity during the p.m. peak hour. Under the a.m. peak hour, the eastbound through movement is expected to operate above the theoretical capacity with a v/c of 1.06 and under the p.m. peak hour, the westbound through movement is approaching capacity with a v/c of 0.99.

Dedicated turn lanes were implemented along Regional roads based on capacity constraints or potential safety issues during either, or both, peak hours.

5.4 2051 Future Total – Intersection Capacity Analysis

5.4.1 2051 Future Total – Without GO

The signal timing modifications under the 2051 future background conditions and the geometric recommendations made under the 2051 future background conditions and 2041 future total conditions without GO Station have been carried forward and applied to 2051 future total conditions without the GO Station. The signal timings have been optimized under this scenario, and a northbound right-turn lane is recommended at the intersection of Trafalgar Road at Collector F, which has been included in the analysis. The capacity results for the external, collector-to-arterial intersections, and collector-to-existing collector intersections during the weekday a.m. and p.m. peak hours under 2051 future total analysis without the GO Station are summarized in **Table 5-8** and **Table 5-9**, respectively. Detailed Synchro reports are attached in **Appendix I.**

Table 5-8 2051 Future Total Capacity Analysis Summary – Without GO: External Intersections

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	**1.33**	**139**	**F**	**1.22**	**118**	**F**
	EBL	**1.58**	**342**	**F**	**1.13**	**174**	**F**
	EBT	**1.02**	67	E	0.75	48	D
	EBR	0.59	48	D	0.26	32	C
	WBL	**1.49**	**308**	**F**	**1.01**	**107**	**F**
	WBT	0.54	46	D	**1.17**	**127**	**F**
	WBR	0.54	49	D	0.13	48	D
	NBL	**0.95**	**91**	**F**	**1.19**	**153**	**F**
	NBT	**1.40**	**218**	**F**	**1.23**	**127**	**F**
	NBR	0.66	32	C	0.35	10	A
	SBL	0.93	**95**	**F**	**1.18**	**161**	**F**
	SBT	**0.98**	53	D	**1.24**	**166**	**F**
	SBR	0.10	53	D	0.75	56	E
Eighth Line & Derry Road	*Overall*	*0.70*	*18*	*B*	*0.73*	*18*	*B*
	EBL	0.31	16	B	0.26	25	C
	EBT	0.70	19	B	0.41	13	B
	EBR	0.11	15	B	0.11	31	C
	WBL	0.56	30	C	0.27	8	A
	WBT	0.38	8	A	0.72	14	B
	WBR	0.02	6	A	0.01	6	A
	NBL	0.66	42	D	0.72	62	E
	NBTR	0.33	40	D	0.15	65	E
	SBL	0.15	61	E	0.15	46	D

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	SBTR	0.17	63	E	0.15	46	D
Trafalgar Road & Britannia Road	*Overall*	**1.18**	**107**	**F**	**1.18**	**99**	**F**
	EBL	**1.34**	**226**	**F**	**1.42**	**271**	**F**
	EBT	0.73	46	D	0.65	48	D
	EBR	**0.92**	71	E	0.28	42	D
	WBL	0.84	**90**	**F**	0.61	**85**	**F**
	WBT	0.38	31	C	**0.87**	42	D
	WBR	0.12	32	C	0.20	13	B
	NBL	**1.14**	**130**	**F**	**1.37**	**219**	**F**
	NBT	**1.10**	**99**	**F**	**1.06**	79	E
	NBR	0.30	57	E	0.22	44	D
	SBL	0.69	78	E	0.80	**92**	**F**
	SBT	**1.28**	**155**	**F**	**1.25**	**139**	**F**
	SBR	0.32	23	C	**0.98**	34	C
Eighth Line & Britannia Road	*Overall*	*0.53*	*16*	*B*	*0.53*	*18*	*B*
	EBL	0.08	7	A	0.10	6	A
	EBT	0.44	8	A	0.34	5	A
	EBR	0.01	9	A	0.01	8	A
	WBL	0.15	16	B	0.12	13	B
	WBT	0.29	16	B	0.47	17	B
	WBR	0.06	13	B	0.04	12	B
	NBL	0.16	37	D	0.30	44	D
	NBTR	0.75	52	D	0.74	55	D
	SBL	0.35	27	C	0.48	36	D
	SBTR	0.41	29	C	0.47	38	D
Trafalgar Road & Lower Base Line	*Overall*	**1.26**	***100***	**F**	**1.22**	**88**	**F**
	EBL	**1.22**	**196**	**F**	0.49	52	D
	EBT	**0.90**	73	E	0.70	61	E
	EBR	0.14	49	D	0.04	51	D
	WBL	**1.33**	**231**	**F**	**1.24**	**204**	**F**
	WBT	0.19	46	D	0.66	68	E
	WBR	0.16	**132**	**F**	**0.94**	**107**	**F**
	NBL	**1.16**	**220**	**F**	**1.17**	**158**	**F**
	NBT	**1.19**	**128**	**F**	**1.10**	**82**	**F**
	NBR	0.27	25	C	0.34	18	B
	SBL	**1.26**	**169**	**F**	**1.23**	**156**	**F**
	SBT	**1.01**	50	D	**1.06**	69	E
	SBR	0.09	29	C	0.07	**277**	**F**
	Overall	*0.59*	*24*	*C*	**0.95**	*55*	*D*
	EBL	<0.01	0	A	0.30	66	E

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	EBR	0.00	66	E	0.01	62	E
	WBL	0.82	61	E	0.57	30	C
	WBT	0.02	44	D	0.03	23	C
	WBR	0.11	45	D	**1.08**	**88**	**F**
	NBL	0.10	12	B	0.10	31	C
	NBT	0.33	12	B	0.80	43	D
	SBT	0.61	20	C	0.79	46	D
	SBR	0.09	13	B	0.03	32	C
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.82*	*23*	*C*	*0.79*	*19*	*B*
	EBL	0.53	20	B	0.58	26	C
	EBR	0.89	41	D	0.88	48	D
	NBT	0.76	22	C	0.74	16	B
	SBT	0.65	19	B	0.63	14	B
Trafalgar Road & Main Street	*Overall*	***0.98***	***83***	***F***	***1.40***	***140***	***F***
	EBL	0.62	60	E	0.64	46	D
	EBT	0.21	56	E	0.08	41	D
	EBR	0.63	65	E	**1.12**	**135**	**F**
	WBL	0.46	55	D	**0.96**	**81**	**F**
	WBTR	0.31	67	E	0.24	43	D
	NBL	0.82	30	C	**1.50**	**280**	**F**
	NBTR	**1.05**	**74**	**E**	0.88	50	D
	SBL	0.61	46	D	0.73	44	D
	SBTR	**1.16**	**122**	**F**	**1.39**	**219**	**F**

Under 2051 future total conditions, most external intersection movements are projected to generally operate well with reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of select movements at the intersections of Trafalgar Road Main Street, Derry Road, Britannia Road, and Lower Base Line.

The 2051 future total conditions without the GO Station is expected to experience an increase in movements that are predicted to be over capacity at the external intersections. This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the 2051 future total traffic conditions without the operation of the future GO Station and full build-out of Agerton, forcing residents and visitors to be auto dependent. It is recommended that the intersections be monitored to determine if the forecasted volumes will be realized in the future, especially if the future GO Station is not operable by then. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the broader Regional and Town road networks, existing traffic may relocate to alternative routes.

Table 5-9 2051 Future Total Capacity Analysis Summary – Without GO: Arterial-Collector Intersections

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Derry Road & Collector K	*Overall*	**1.01**	*27*	*C*	**0.88**	*11*	*B*
	EBL	0.12	8	A	0.55	41	D
	EBT	**0.96**	28	C	0.35	5	A
	EBR	0.05	7	A	0.14	4	A
	WBL	0.13	8	A	0.09	3	A
	WBT	0.33	4	A	**0.92**	11	B
	WBR	0.01	10	B	0.01	6	A
	NBL	**0.98**	**98**	**F**	0.75	71	E
	NBTR	0.01	43	D	0.00	51	D
	SBL	0.25	47	D	0.13	54	D
	SBT	<0.01	0	A	<0.01	0	A
	SBR	0.01	43	D	0.01	51	D
Derry Road & Collector G/Z-10 Local	EBT	0.49	0	A	0.28	0	A
	EBR	0.03	0	A	0.13	0	A
	WBTR	0.32	0	A	0.62	0	A
	NBR	0.03	10	B	0.10	9	A
	SBR	0.11	10	A	0.10	11	B
Derry Road & Collector H	*Overall*	**0.96**	*14*	*B*	*0.76*	*14*	*B*
	EBL	**1.01**	64	E	0.54	43	D
	EBTR	0.75	8	A	0.41	6	A
	WBL	0.28	19	B	0.16	8	A
	WBTR	0.43	7	A	0.79	12	B
	NBLTR	0.82	71	E	0.69	78	E
	SBLTR	0.13	43	D	0.47	59	E
Derry Road & Collector J/Z-15 Access	*Overall*	**1.08**	*22*	*C*	**0.99**	*19*	*B*
	EBL	**1.17**	**136**	**F**	**1.02**	**151**	**F**
	EBTR	0.77	13	B	0.48	5	A
	WBL	0.17	14	B	0.13	11	B
	WBTR	0.47	10	B	0.74	15	B
	NBLTR	**0.86**	68	E	**0.96**	**116**	**F**
	SBLTR	0.07	39	D	0.69	60	E
Derry Road & Collector A	EBT	0.69	0	A	0.28	0	A
	WBT	0.30	0	A	**0.97**	0	A
	WBR	0.01	0	A	0.02	0	A
	SBR	0.07	10	B	0.13	29	D
Trafalgar Road & Collector F	*Overall*	**1.12**	*78*	*E*	**0.86**	*25*	*C*
	EBL	**1.00**	**130**	**F**	0.79	**108**	**F**
	EBTR	0.38	45	D	0.51	60	E

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	WBL	0.62	53	D	0.55	64	E
	WBTR	0.59	49	D	0.68	67	E
	NBL	0.56	18	B	0.59	36	D
	NBT	**1.15**	**119**	**F**	0.62	31	C
	NBR	0.18	29	C	0.16	30	C
	SBL	**1.15**	**166**	**F**	0.58	45	D
	SBTR	0.70	17	B	**0.89**	12	B
Trafalgar Road & Collector D	*Overall*	**1.35**	**106**	**F**	**1.16**	*75*	*E*
	EBL	**1.24**	**192**	**F**	**1.17**	**193**	**F**
	EBTR	0.58	49	D	0.15	38	D
	WBL	0.75	72	E	**1.09**	**129**	**F**
	WBTR	0.12	42	D	0.65	47	D
	NBL	**0.96**	75	E	**1.20**	**198**	**F**
	NBT	**1.28**	**151**	**F**	0.72	8	A
	NBR	0.26	8	A	0.05	5	A
	SBL	**1.35**	**209**	**F**	0.80	40	D
	SBTR	0.70	29	C	**1.14**	**104**	**F**
Trafalgar Road & Collector E	*Overall*	**0.92**	*24*	*C*	*0.84*	*10*	*B*
	EBL	0.42	62	E	0.05	55	D
	EBTR	0.06	57	E	0.06	52	D
	WBL	0.55	63	E	0.70	70	E
	WBTR	0.09	52	D	0.11	53	D
	NBL	0.14	8	A	0.34	60	E
	NBTR	**1.01**	30	C	0.58	2	A
	SBL	0.59	58	E	0.43	23	C
	SBTR	0.56	8	A	**0.88**	10	B
Main Street & Eighth Line	EBL	0.36	10	B	0.32	10	B
	SBR	0.21	8	A	0.30	8	A

Under 2051 future total conditions, most of the arterial-to-collector intersection movements are projected to operate under capacity with the exception of select movements at the intersections of Derry Road at Collector H, Derry Road at Collector J/Z-15 Access, Trafalgar Road at Collector F, Trafalgar Road at Collector D, and Trafalgar Road at Collector E.

At the intersection of Derry Road at Collector H, the eastbound left is projected to operate beyond capacity with a v/c ratio of 1.01 under the a.m. peak hour.

At the intersection of Derry Road at Collector J/Z-15 Access, the eastbound left movement is projected to operate beyond the theoretical capacity with a v/c ratio of 1.17 and 1.02 under both a.m. and p.m. peak hours, respectively.

At the intersection of Trafalgar Road at Collector F, the eastbound left, northbound through, and southbound left movements are expected to operate beyond the theoretical capacity with v/c ratios of 1.00, 1.15, and 1.15, respectively, under the a.m. peak hour.

At the intersection of Trafalgar Road at Collector D, the eastbound left, northbound through, and southbound left movements are expected to operate beyond capacity during the a.m. peak hour. During the p.m. peak hour, the eastbound left, westbound left, northbound left, and shared southbound through-right movements are expected to operate beyond capacity.

These movements are on the collector roads and experience the delay due to the 140 second cycle length of the intersection and the signal timing plans favouring the higher volume arterial road. Additionally, the results present a more conservative assessment as it does not consider the operation of the future GO Station to be in effect during the full build-out of the Agerton development, forcing residents and visitors to rely on auto modes of travel.

5.4.2 2051 Future Total – With GO

The signal timing modifications and geometric recommendations under the 2051 future total conditions without the GO Station have been carried forward and applied to the 2051 future total conditions with the GO Station. The capacity results for the external, collector-to-arterial intersections, and collector-to-existing collector intersections during the weekday a.m. and p.m. peak hours under 2051 future total analysis without the GO Station are summarized in **Table 5-10** and **Table 5-11**, respectively. Detailed Synchro reports are attached in **Appendix I.**

Table 5-10 2051 Future Total Capacity Analysis Summary – With GO: External Intersections

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Trafalgar Road & Derry Road	*Overall*	**1.27**	**121**	**F**	**1.19**	**105**	**F**
	EBL	**1.46**	**287**	**F**	**1.12**	**170**	**F**
	EBT	**1.00**	62	E	0.75	48	D
	EBR	0.58	47	D	0.26	32	C
	WBL	**1.32**	**230**	**F**	**0.96**	**96**	**F**
	WBT	0.53	47	D	**1.17**	**129**	**F**
	WBR	0.50	49	D	0.12	47	D
	NBL	**0.95**	**101**	**F**	**1.20**	**159**	**F**
	NBT	**1.33**	**190**	**F**	**1.16**	**95**	**F**
	NBR	0.61	35	C	0.32	10	A
	SBL	0.91	**90**	**F**	**1.25**	**196**	**F**
	SBT	**0.97**	54	D	**1.17**	**135**	**F**
	SBR	0.10	58	E	0.76	54	D
Eighth Line & Derry Road	*Overall*	*0.69*	*17*	*B*	*0.72*	*17*	*B*
	EBL	0.28	15	B	0.24	23	C
	EBT	0.69	18	B	0.41	13	B
	EBR	0.10	14	B	0.10	28	C
	WBL	0.56	30	C	0.27	8	A
	WBT	0.37	8	A	0.72	14	B
	WBR	0.02	6	A	0.01	6	A
	NBL	0.61	41	D	0.71	62	E
	NBTR	0.28	42	D	0.14	68	E
	SBL	0.15	61	E	0.15	46	D
	SBTR	0.15	63	E	0.13	46	D
Trafalgar Road & Britannia Road	*Overall*	**1.17**	**91**	**F**	**1.14**	***87***	**F**
	EBL	**1.33**	**226**	**F**	**1.40**	**267**	**F**
	EBT	0.75	47	D	0.65	48	D
	EBR	**0.95**	78	**E**	0.26	42	D
	WBL	0.84	**85**	**F**	0.64	**87**	**F**
	WBT	0.37	31	C	**0.87**	43	D
	WBR	0.09	35	D	0.18	13	B
	NBL	**1.24**	**171**	**F**	**1.30**	**177**	**F**
	NBT	**1.01**	61	E	**1.03**	66	E
	NBR	0.28	57	E	0.22	42	D
	SBL	0.63	75	E	0.77	**93**	**F**
	SBT	**1.21**	**128**	**F**	**1.21**	**121**	**F**
	SBR	0.28	26	C	0.91	27	C
	Overall	*0.52*	*16*	*B*	*0.52*	*19*	*B*

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Eighth Line & Britannia Road	EBL	0.08	6	A	0.09	6	A
	EBT	0.42	7	A	0.33	6	A
	EBR	0.01	8	A	0.01	8	A
	WBL	0.15	15	B	0.11	13	B
	WBT	0.28	15	B	0.46	16	B
	WBR	0.05	12	B	0.04	11	B
	NBL	0.16	36	D	0.29	52	D
	NBTR	0.73	51	D	0.74	65	E
	SBL	0.35	29	C	0.45	36	D
	SBTR	0.43	32	C	0.45	38	D
Trafalgar Road & Lower Base Line	*Overall*	**1.25**	**88**	**F**	**1.20**	*71*	*E*
	EBL	**1.24**	**203**	**F**	0.45	52	D
	EBT	**0.94**	**80**	**F**	0.71	62	E
	EBR	0.15	50	D	0.04	51	D
	WBL	**1.33**	**232**	**F**	**1.19**	**163**	**F**
	WBT	0.19	46	D	0.64	45	D
	WBR	0.15	**128**	**F**	0.88	63	E
	NBL	**1.19**	**228**	**F**	**1.16**	**154**	**F**
	NBT	**1.10**	**90**	**F**	**1.09**	**81**	**F**
	NBR	0.26	24	C	0.34	19	B
	SBL	**1.30**	**189**	**F**	**1.18**	**158**	**F**
	SBT	**0.99**	42	D	**1.04**	38	D
	SBR	0.09	26	C	0.06	**99**	**F**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	*Overall*	*0.63*	*26*	*C*	**0.94**	*54*	*D*
	EBL	<0.01	0	A	0.30	65	E
	EBR	0.00	66	E	0.01	62	E
	WBL	0.82	61	E	0.56	29	C
	WBT	0.02	45	D	0.03	22	C
	WBR	0.11	46	D	**1.06**	**83**	**F**
	NBL	0.09	12	B	0.10	31	C
	NBT	0.32	12	A	0.80	44	D
	SBT	0.59	19	B	0.78	47	D
	SBR	0.09	13	B	0.03	32	C
Trafalgar Road & Hwy 401 EB Off-ramp/Hwy 401 EB On-Ramp (NB)	*Overall*	*0.78*	*22*	*C*	*0.70*	*15*	*B*
	EBL	0.51	20	B	0.57	26	C
	EBR	0.84	35	D	0.86	46	D
	NBT	0.73	20	C	0.72	16	B
	SBT	0.61	18	B	0.61	13	B
Trafalgar Road & Main Street	*Overall*	***1.02***	***74***	***E***	***1.32***	***128***	***F***
	EBL	**0.95**	**116**	**F**	**0.93**	**87**	**F**

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	EBT	0.24	53	D	0.13	42	D
	EBR	0.48	56	E	**1.07**	**119**	**F**
	WBL	0.56	54	D	**0.91**	**71**	**E**
	WBTR	0.74	62	E	0.62	49	D
	NBL	0.83	33	C	**1.42**	**245**	**F**
	NBTR	1.03	69	E	**0.86**	46	D
	SBL	0.62	46	D	0.69	44	D
	SBTR	**1.11**	**101**	**F**	**1.37**	**210**	**F**

Under 2051 future total conditions with the GO Station, most external intersection movements are expected to operate with some reserve capacity and acceptable delays, with the exception of select movements at the intersections of Trafalgar Road Main Street, Derry Road, Britannia Road, and Lower Base Line that are expected to operate above theoretical capacity. Several intersections in the study area are expected to perform at a Level of Service (LOS) "E" or better, even with their maximum volume. While these intersections may operate beyond theoretical capacity during peak hours, this is a typical scenario at the crossroads of two major arterials. Importantly, the traffic flow at these intersections is anticipated to return to manageable levels outside of peak periods.

In comparison to the 2051 future total conditions without the GO Station, the difference in results illustrate the impact a GO Station would have on the surrounding road network and the need for a GO Station to support the future intensification within the Agerton area under 2051.

For the intersections that are predicted to experience over capacity movements under 2051 future total conditions with the GO Station it is recommended that the intersections be monitored through the Draft Plan Traffic Impact Studies to determine if the forecasted volumes will be realized in the future. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the network, existing traffic may relocate to alternative routes.

Highly relevant to the need and desire for intensification, is that a high-volume of 2051 background traffic on the regional roads is through-traffic. Desired intensification in this area should not be prevented by through-traffic on the regional roads which dominates the vehicle counts. Some priority in the modelling should be attributed to future local traffic, leaving the through traffic to either accept longer trip durations or choose a different route, mode or time of travel.

This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the 2041 and 2051 future total traffic conditions. It is recommended that the intersections be monitored to determine if the forecasted volumes will be realized in the future.

Table 5-11 2051 Future Total Capacity Analysis Summary – With GO: Arterial-Collector Intersections

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
Derry Road & Collector K	*Overall*	**1.01**	*27*	*C*	**0.89**	*11*	*B*
	EBL	0.11	8	A	0.54	41	D
	EBT	**0.96**	28	C	0.35	5	A
	EBR	0.05	7	A	0.14	4	A
	WBL	0.13	8	A	0.09	3	A
	WBT	0.33	4	A	**0.93**	11	B
	WBR	0.01	10	A	0.01	6	A
	NBL	**0.98**	**98**	**F**	0.74	71	E
	NBTR	0.01	43	D	0.00	51	D
	SBL	0.24	47	D	0.12	53	D
	SBT	<0.01	0	A	<0.01	0	A
	SBR	0.02	43	D	0.00	51	D
Derry Road & Collector G/Z-10 Local	EBT	0.49	0	A	0.28	0	A
	EBR	0.03	0	A	0.13	0	A
	WBTR	0.32	0	A	0.62	0	A
	NBR	0.03	10	B	0.10	9	A
	SBR	0.10	10	A	0.08	11	B
Derry Road & Collector H	*Overall*	**0.87**	*13*	*B*	*0.75*	*13*	*B*
	EBL	**0.90**	38	D	0.57	41	D
	EBTR	0.75	7	A	0.40	6	A
	WBL	0.28	19	B	0.15	8	A
	WBTR	0.42	7	A	0.77	12	B
	NBLTR	0.81	69	E	0.67	75	E
	SBLTR	0.12	43	D	0.46	59	E
Derry Road & Collector J/Z-15 Access	*Overall*	**0.99**	*20*	*B*	**0.94**	*18*	*B*
	EBL	**1.05**	**93**	**F**	**0.94**	**126**	**F**
	EBTR	0.77	14	B	0.47	5	A
	WBL	0.17	15	B	0.12	11	B
	WBTR	0.47	11	B	0.73	15	B
	NBLTR	0.84	65	E	**0.94**	**112**	**F**
	SBLTR	0.06	39	D	0.64	58	E
Derry Road & Collector A	EBT	0.69	0	A	0.28	0	A
	WBT	0.30	0	A	**0.97**	0	A
	WBR	0.01	0	A	0.02	0	A
	SBR	0.07	10	B	0.17	31	D
Trafalgar Road & Collector F	*Overall*	**1.04**	*58*	*E*	*0.84*	*22*	*C*
	EBL	**1.00**	**132**	**F**	**0.91**	**148**	**F**
	EBTR	0.38	46	D	0.48	60	E

Intersection	Movement	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour		
		v/c	Delay (s)	LOS	v/c	Delay (s)	LOS
	WBL	0.58	52	D	0.52	62	E
	WBTR	0.59	50	D	0.67	67	E
	NBL	0.41	24	C	0.55	31	C
	NBT	**1.06**	**82**	**F**	0.56	25	C
	NBR	0.12	29	C	0.13	22	C
	SBL	**1.01**	**128**	**F**	0.58	34	C
	SBTR	0.64	13	B	0.84	11	B
Trafalgar Road & Collector D	*Overall*	**1.27**	**96**	**F**	**1.09**	*58*	*E*
	EBL	**1.16**	**162**	**F**	**1.09**	**162**	**F**
	EBTR	0.49	47	D	0.14	37	D
	WBL	0.58	53	D	**0.95**	**87**	**F**
	WBTR	0.11	41	D	0.59	45	D
	NBL	0.58	31	C	**1.07**	**160**	**F**
	NBT	**1.25**	**137**	**F**	0.71	7	A
	NBR	0.24	9	A	0.05	5	A
	SBL	**1.28**	**185**	**F**	0.77	38	D
	SBTR	0.65	27	C	**1.09**	**80**	**F**
Trafalgar Road & Collector E	*Overall*	**0.88**	*17*	*B*	*0.80*	*9*	*A*
	EBL	0.46	63	E	0.06	55	E
	EBTR	0.06	59	E	0.06	54	D
	WBL	0.52	63	E	0.67	69	E
	WBTR	0.09	53	D	0.11	54	D
	NBL	0.08	7	A	0.34	49	D
	NBTR	**0.95**	19	B	0.57	2	A
	SBL	0.57	57	E	0.41	23	C
	SBTR	0.53	8	A	0.83	8	A
Main Street & Eighth Line	EBL	0.45	13	B	0.40	12	B
	SBR	0.57	13	B	0.61	13	B

Overall, most of the arterial-to-collector intersection movements are expected to operate with reserve capacity and experience an LOS of 'E' or better under 2051 future total conditions. Some individual movements experience LOS 'F', however, these movements typically operate with reserve capacity. The higher delays (LOS 'E' and 'F') are due in part to relatively long cycle lengths of 140 seconds implemented along the Reginal corridors which inherently add delay to dedicated turning movements and vehicles on the minor approaches. Although select movements at the intersections of Derry Road at Collector J/Z-15 Access, Trafalgar Road at Collector F, and Trafalgar Road at Collector D are expected to operate beyond capacity.

At the intersection of Trafalgar Road at Collector J/Z-15 Access, the eastbound left movement is expected to operate beyond capacity with a v/c ratio of 1.05 during the a.m. peak hour.

At the intersection of Trafalgar Road at Collector F, the eastbound left, northbound through, southbound left movements are expected to operate beyond capacity with v/c ratios of 1.00, 1.06, and 1.01 respectively, during the a.m. peak hour.

At the intersection of Trafalgar Road at Collector D, the eastbound left, northbound through, and southbound left movements are expected to operate beyond capacity during the a.m. peak hour with v/c ratios of 1.16, 1.25, and 1.28 respectively. During the p.m. peak hour, the eastbound left, northbound left, and combined southbound through-right movements are expected to operate at or above capacity with v/c ratios of 1.09, 1.07, and 1.09 respectively.

Dedicated turn lanes were implemented along Regional roads based on capacity constraints or potential safety issues during either, or both, peak hours.

5.5 Future Total Queueing Capacity Analysis

5.5.1 2031 Future Total Queues – Without GO

The 2031 future total – Without GO traffic conditions queueing results are provided in **Appendix I**. Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 5-12**.

Table 5-12 2031 Future Total – Without GO Queueing Analysis: Critical Movements

Intersection	Movement	Storage (m)	Weekday AM Peak Hour		Weekday PM Peak Hour	
			50th Percentile Queue (m)	95th Percentile Queue (m)	50th Percentile Queue (m)	95th Percentile Queue (m)
Trafalgar Road & Derry Road	EBL	130	127	**136**		
	WBL	130	84	**145**	81	**144**
	SBR	85	**-**	**-**	**90**	**127**
Trafalgar Road & Britannia Road	EBR	85	66	**95**	**-**	**-**
Trafalgar Road & Hwy 401 WB On-Ramp/Hwy 401 WB Off-Ramp	WBL	90	-	**-**	70	**103**
	WBR	80	-	**-**	**209**	**290**
Trafalgar Road & Collector D	EBL	50	36	**56**	**-**	**-**

Under the 2031 future total conditions, at the intersection of Trafalgar Road and Derry Road, the 95th percentile queue at westbound left movement is expected to queue beyond the proposed storage under both peak hours and the southbound right movement is projected to queue beyond the storage under the p.m. peak hour. The westbound left queue is expected to be contained by the taper distance and the southbound right queue is expected to be cleared within a single signal cycle.

At the Trafalgar Road & Highway 401 north terminal intersection, the westbound right-turn movement features dual right-turn lanes: the first with a storage length of 80 m and the second

approximately 400 m, providing a total storage of 480 m. The dual turn movement storage lanes are expected to fully accommodate the projected queue.

The remaining critical queues identified above are expected to be contained within the taper distance and to be cleared within a single signal cycle length, which is deemed acceptable.

5.5.2 2041 Future Total Queues – Without GO

The 2041 future total – Without GO traffic conditions queueing results are provided in **Appendix I**. Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 5-13**.

Table 5-13 2041 Future Total – Without GO Queueing Analysis: Critical Movements

Intersection	Movement	Storage (m)	Weekday AM Peak Hour		Weekday PM Peak Hour	
			50th Percentile Queue (m)	95th Percentile Queue (m)	50th Percentile Queue (m)	95th Percentile Queue (m)
Trafalgar Road & Derry Road	EBL	130	**172**	**157**	-	-
	SBR	85	-	-	**98**	**159**
Eighth Line & Derry Road	NBL	50	30	**54**	-	-
Trafalgar Road & Britannia Road	EBR	85	**106**	**169**	-	-
Trafalgar Road & Lower Base Line	WBL	110	90	**150**	-	-
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-Ramp	WBR	80	-	-	**221**	**307**
Trafalgar Road & Main Street	WBL	90	-	-	74	**115**
	NBL	50	-	-	94	**171**
Trafalgar Road & Collector D	EBL	50	**75**	**130**	-	-
	NBL	50	-	-	37	**66**
	SBL	100	70	**125**	-	-

Under the 2041 future total without GO conditions, select movements are expected to queue beyond the proposed storage length.

At the intersection of Trafalgar Road at Derry Road, the average and 95th percentile queue for the eastbound left movement is expected to queue beyond the storage under the a.m. peak hour, but is expected to be contained within the taper length and cleared within a single signal cycle. The average and 95th percentile queue for the southbound right movement is expected to queue beyond the storage under the p.m. peak hour.

At the Trafalgar Road & Highway 401 north terminal intersection, the westbound right-turn movement features dual right-turn lanes: the first with a storage length of 80 m and the second approximately 400 m, providing a total storage of 480 m. The dual turn movement storage lanes are

expected to fully accommodate the projected queue. At the Trafalgar Road & Highway 401 south terminal, the 95th percentile queues that are projected to queue beyond the storage is expected to be contained within the taper under both peak hours.

At the intersection of Trafalgar & Collector D, the average and 95th percentile queueing for the eastbound left-turn movement is projected to queue beyond the storage length, though the average queue is expected to be contained within the taper length and cleared within a single signal cycle.

Overall, majority of the average queues that are projected under the 2041 future total without GO scenario can be contained within the storage and taper length and cleared within a single signal cycle, which is deemed acceptable.

5.5.3 2041 Future Total Queues – With GO

The 2041 future total – With GO traffic conditions queueing results are provided in **Appendix I**. Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 5-14**.

Table 5-14 2041 Future Total – With GO Queueing Analysis: Critical Movements

Intersection	Movement	Storage (m)	Weekday AM Peak Hour		Weekday PM Peak Hour	
			50th Percentile Queue (m)	95th Percentile Queue (m)	50th Percentile Queue (m)	95th Percentile Queue (m)
Trafalgar Road & Derry Road	EBL	130	**169**	**155**	-	-
	SBR	85	-	-	**98**	**156**
Trafalgar Road & Britannia Road	EBR	85	**106**	**169**	-	-
Trafalgar Road & Lower Base Line	WBL	110	85	**145**	-	-
	NBL	100	-	-	68	**122**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-Ramp	WBR	80	-	-	**219**	**304**
Collector K & Derry Road	NBL	100	87	**147**	-	-
	WBL	90	-	-	67	**111**
	NBL	50	74	**83**	93	**172**
Trafalgar Road & Collector D	EBL	50	**71**	**123**	26	**52**
	SBL	100	65	**116**	-	-

Under the 2041 future total with GO conditions, select movements are expected to queue beyond the proposed storage length.

At the intersection of Trafalgar Road at Derry Road, the average and 95th percentile queue for the eastbound left movement is expected to queue beyond the storage under the a.m. peak hour, but is expected to be contained within the taper length and cleared within a single signal cycle. The 95th percentile queue for the southbound right movement is expected to queue beyond the storage

under the p.m. peak hour, but the average queue is expected to be contained within the storage without blocking the adjacent lane.

At the Trafalgar Road & Highway 401 north terminal intersection, the westbound right-turn movement features dual right-turn lanes: the first with a storage length of 80 m and the second approximately 400 m, providing a total storage of 480 m. The dual turn movement storage lanes are expected to fully accommodate the projected queue. At the Trafalgar Road & Highway 401 south terminal, the 95th percentile queues that are projected to queue beyond the storage is expected to be contained within the taper under both peak hours.

Overall, majority of the average queues that are projected under the 2041 future total with GO scenario can be contained within the storage and taper length and cleared within a single signal cycle, which is deemed acceptable.

5.5.4 2051 Future Total Queues – Without GO

The 2051 future total – Without GO traffic conditions queueing results are provided in **Appendix I**. Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 5-15**.

Table 5-15 2051 Future Total – Without GO Queueing Analysis: Critical Movements

Intersection	Movement	Storage (m)	Weekday AM Peak Hour		Weekday PM Peak Hour	
			50th Percentile Queue (m)	95th Percentile Queue (m)	50th Percentile Queue (m)	95th Percentile Queue (m)
Trafalgar Road & Derry Road	EBL	130	**225**	**238**	-	-
	WBL	130	-	-	-	**-**
	SBR	85	-	-	**142**	**180**
Eighth Line & Derry Road	NBL	50	48	**100**	38	**58**
Trafalgar Road & Britannia Road	EBL	125	118	**156**	-	-
	EBR	85	**117**	**186**	-	-
Trafalgar Road & Lower Base Line	EBL	90	82	**136**	-	-
	WBL	120	118	**181**	96	**158**
	WBR	70	-	-	**80**	**175**
	NBL	100	-	-	85	**145**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	WBL	90	-	-	**95**	**135**
	WBR	80	-	-	**236**	**318**
Trafalgar Road & Hwy 401 EB On-Ramp /Hwy 401 EB Off-ramp (NB)	EBR	125	74	**160**	-	-
Trafalgar Road & Main Street	EBL	60	-	-	54	**93**
	EBR	50	-	-	**182**	**256**

Intersection	Movement	Storage (m)	Weekday AM Peak Hour		Weekday PM Peak Hour	
			50th Percentile Queue (m)	95th Percentile Queue (m)	50th Percentile Queue (m)	95th Percentile Queue (m)
	WBL	90	-	-	89	**135**
	NBL	50	**128**	**110**	195	**259**
	SBL	50	24	**78**	18	**54**
Collector K & Derry Road	NBL	100	87	**147**	-	-
Collector H & Derry Road	EBL	50	20	**67**	-	-
Collector J/Z-15 Access & Derry Road	EBL	50	57	**96**	-	-
Trafalgar Road & Collector F	EBL	60	39	**83**	-	-
	WBL	50	33	**57**	-	-
	SBL	70	55	**104**	-	-
Trafalgar Road & Collector D	EBL	50	**106**	**164**	39	**79**
	WBL	80	-	-	**100**	**159**
	NBL	50	-	-	53	**109**
	SBL	100	**133**	**129**	-	-
Trafalgar Road & Collector E	WBL	50	**-**	**-**	33	**52**

Under the 2051 future total without GO conditions, select movements are expected to queue beyond the proposed storage length.

At the intersection of Trafalgar Road at Derry Road, the average and 95th percentile queue for the eastbound left and southbound right movements are expected to queue beyond the storage under the a.m. peak hour and p.m. peak hour, respectively.

At the Trafalgar Road at Highway 401 north terminal intersection, the westbound right-turn movement features dual right-turn lanes: the first with a storage length of 80 m and the second approximately 400 m, providing a total storage of 480 m. The dual turn movement storage lanes are expected to fully accommodate the projected queue.

At Trafalgar Road at Collector D, average and 95th percentile queues for the eastbound left and southbound left movements are expected to queue beyond the storage length under the a.m. peak hour and the westbound left movement is expected to queue beyond capacity during the p.m. peak hour.

Overall, majority of the average queues that are projected under the 2051 future total without GO scenario can be contained within the storage and taper length and cleared within a single signal cycle, which is deemed acceptable.

5.5.5 2051 Future Total Queues – With GO

The 2051 future total – With GO traffic conditions queueing results are provided in **Appendix I**.

Individual critical movements that exceed storage lengths, during either peak hour, are listed in **Table 5-16**.

Table 5-16 2051 Future Total – With GO Queueing Analysis: Critical Movements

Intersection	Movement	Storage (m)	Weekday AM Peak Hour		Weekday PM Peak Hour	
			50th Percentile Queue (m)	95th Percentile Queue (m)	50th Percentile Queue (m)	95th Percentile Queue (m)
Trafalgar Road & Derry Road	EBL	130	**214**	**228**	-	-
	WBL	130	-	-	-	-
	SBR	85	-	-	**138**	**192**
Eighth Line & Derry Road	NBL	50	43	**91**	37	**57**
Trafalgar Road & Britannia Road	EBL	125	104	**142**	-	-
	EBR	85	**121**	**193**	-	-
Trafalgar Road & Lower Base Line	EBL	90	80	**134**	-	-
	WBL	120	119	**183**	85	**152**
	WBR	70	-	-	**86**	**102**
	NBL	100	-	-	86	**145**
Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp	WBL	90	-	-	**93**	**134**
	WBR	80	-	-	**233**	**317**
Trafalgar Road & Main Street	EBL	60	-	-	**57**	**109**
	EBR	50	-	-	**178**	**252**
	WBL	90	-	-	84	**126**
	NBL	50	**121**	**102**	**190**	**253**
	SBL	50	18	**58**	-	-
Collector K & Derry Road	NBL	100	87	**147**	-	-
	SBL	30	18	**32**	-	-
Collector H & Derry Road	EBL	50	13	**60**	-	-
Collector J/Z-15 Access & Derry Road	EBL	50	30	**86**	-	-
Trafalgar Road & Collector F	EBL	60	38	**81**	-	-
	WBL	50	30	**52**	-	-
	SBL	70	43	**89**	-	-
Trafalgar Road & Collector D	EBL	50	**97**	**155**	38	**80**
	WBL	80	-	-	**78**	**136**
	NBL	50	-	-	36	**90**
	SBL	100	**121**	**123**	-	-

Under the 2051 future total with GO conditions, select movements are expected to queue beyond the proposed storage length.

At the intersection of Trafalgar Road at Derry Road, the average and 95th percentile queue for the eastbound left and southbound right movements are expected to queue beyond the storage under

the a.m. peak hour and p.m. peak hour, respectively.

At the Trafalgar Road at Highway 401 north terminal intersection, the westbound right-turn movement features dual right-turn lanes: the first with a storage length of 80 m and the second approximately 400 m, providing a total storage of 480 m. The dual turn movement storage lanes are expected to fully accommodate the projected queue.

At Trafalgar Road at Collector D, average and 95th percentile queues for the eastbound left and southbound left movements are expected to queue beyond the storage length under the a.m. peak hour and the westbound left movement is expected to queue beyond capacity during the p.m. peak hour.

Overall, majority of the average queues that are projected under the 2051 future total with GO scenario can be contained within the storage and taper length and cleared within a single signal cycle, which is deemed acceptable.

6 TRANSPORTATION CAPACITY LIMIT ASSESSMENT

The Agerton Secondary Plan establishes a target of 14,100 residents and 17,500 jobs within the Secondary Plan area, with the Milton Trafalgar Major Transit Station Area (MTSA) identified as the highest-density, transit-oriented node centered on the future Milton Trafalgar GO Station.

This Transportation Capacity Limit Assessment evaluates the maximum population that can be supported prior to the commencement of GO Station operations, recognizing that development within the Agerton Secondary Plan Area will be guided by available transportation (including transit) capacity thresholds. While the plan targets 17,500 jobs, the current trip generation analysis calculates employment trips based on GFA rather than the full job total, reflecting the capacity of the area currently available for development.

The 2041 intersection capacity analysis without GO scenario, presented in **Section 5.3.1**, indicates that all study intersections are expected to operate around capacity (v/c ≈ 1.0). This reflects the threshold condition, encompassing 90% of the projected population and 55% of projected employment as summarized in **Table 4-1**.

The 2051 intersection capacity analysis without GO scenario, presented in **Section 5.4.1**, shows that several intersections along Trafalgar Road, notably at Derry Road, Britannia Road, and Lower Base Line, are projected to operate over capacity. This outcome suggests that without the future intensification associated with the GO Station in the Agerton area, the roadway network will experience capacity constraints under the 2051 full build-out scenario.

To identify the 2051 threshold condition, trips generated by the remaining 10% of population growth and 55% of employment were compared, as summarized below. Residential trip generation data were derived from **Section 4.6.3** (2051) and **Section 4.6.2** (2041), while office, industrial park, and business park trip data were obtained from **Section 4.6.2**.

Table 6-1 Trips Comparison for Threshold Testing

Trip Type	Population / Employment Assumption	AM Trips			PM Trips		
		IN	OUT	Total	IN	OUT	Total
2051 Residential Trips (a)	100% population	392	1425	1817	1071	339	1410
2041 Residential Trips (b)	90% population	355	1292	1647	968	304	1272
(a) – (b)	10% population	37	133	170	103	35	138
2041 Employment Trips	55% of employment	1780	478	2258	620	1681	1681
Difference		+1743	+345	+2088	+517	+1646	+1543

The comparison indicates a difference of 2,088 trips in the a.m. peak and 1,543 trips in the p.m. peak. Considering that 55% employment represents a substantially higher demand than the remaining 10% population growth, the difference is estimated to account for 10 years of additional growth. This approach, assuming 100% population without employment in 2051 in place of the 2041 scenario of 90% population and 55% employment, is therefore considered conservative in assessing the network's capacity prior to the implementation of the GO Station. The results suggest that the proposed traffic network in 2051 could accommodate full residential build-out (100% population) in the absence of employment development.

Notwithstanding the above comparison estimates, development in the MTSA will be guided by transportation (including transit) and capacity thresholds. Understanding the MTSA is planned to accommodate a population of 14,100 people and considering the phased approach of population and employment growth between 2031 and 2051, it is TYLin's opinion a maximum of 12,690 people (90% of the Secondary Plan target) can be accommodated before the Milton Trafalgar GO Station is in operation. This limit may be raised without an amendment to this Secondary Plan if a transportation study is conducted that supports additional population to the satisfaction of Halton Region and the Town of Milton.

7 CONCLUSIONS AND RECOMMENDATIONS

Existing 2025 Conditions

Turning movement count traffic data was surveyed at the existing study area intersections during the a.m. and p.m. peak periods on Wednesday, May 28, 2025.

Under existing conditions, all study area intersections operate with overall reserve capacity and acceptable delays during both the weekday a.m. and p.m. peak hours, with some exceptions. Although select movements experience level-of-service (LOS) F, all movements operate with volume-to-capacity (v/c) ratios below 1.0 during both peak hours, indicating reserve capacity.

Future Background 2031 Conditions

Intersection / Road Improvement

HOV/Bus lanes are to be implemented on Trafalgar Road, Britannia Road, and Derry Road under future background and future total conditions upon Regional widening of Trafalgar Road and Derry Road to three lanes in each direction. Dedicated turn-lane installations are also planned at Trafalgar/Derry (northbound right, westbound right), Trafalgar/Britannia (northbound right, southbound right), Trafalgar/Lower Base Line (northbound right, southbound right), Eighth Line/Britannia (westbound right), and Eighth Line/Derry (eastbound right, westbound right).

Dual left-turn lanes are also recommended at the intersection of Trafalgar Road and Derry Road on the northbound, southbound, and eastbound approaches to accommodate background traffic growth.

Analysis Summary

Under 2031 future background conditions, all study area intersections are predicted to generally operate with overall reserve capacity and acceptable delays during both the weekday a.m. and p.m. peak hours, with some exceptions. Although some movements experience LOS F, the v/c ratio is less than 1.0 during both peak hours in most cases, indicating some reserve capacity. A small percentage of movements are projected to operate with v/c ratios over 1.0, largely coinciding with existing operational deficiencies.

Select movements are expected to queue beyond the proposed storage length. The southbound right movement at the intersection of Trafalgar Road and Derry Road and the westbound right movement at the intersection of Trafalgar Road and Highway 401 westbound on- and off-ramp were also previously identified under existing conditions to exceed the existing storage, demonstrating that it is an existing issue.

Future Background 2041 Conditions

Intersection / Road Improvement

To accommodate future background traffic, dual left-turn lanes are recommended in several locations, including the westbound approach of Derry Road at Trafalgar Road, the north- and southbound approaches of Trafalgar Road at Britannia Road, and at the southbound approach of Trafalgar Road at Lower Base Line.

The Main Street Extension from Fifth Line to Trafalgar Road has been included under the 2041 horizon year. At the time of this report, the EA is currently underway with construction anticipated to begin as early as 2027 between Fifth Line and Sixth Line. As for the construction of Main Street from Sixth Line to Trafalgar Road, no construction timeline has been announced as it is currently in the post period. For the purposes of this analysis, it is assumed that the Main Street Extension from Sixth Line to Trafalgar Road will be constructed and operational under the 2041 horizon year.

Analysis Summary

Under 2041 future background conditions, the study area intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception for the critical movements that were identified under 2031 future background conditions.

Future Background 2051 Conditions

Intersection / Road Improvement

Localized widening of Lower Base Line to four lanes (two lanes in each direction) is expected to be implemented within the 2051 horizon, as proposed by the Town of Milton in Figure 4 – Proposed Road Network (Town-wide) of the Milton TMP Update (February 2025). Dedicated eastbound and westbound right-turn lanes are also recommended at this intersection to accommodate background traffic growth under the Year 2051 horizon.

Analysis Summary

Under 2051 future background conditions, the study area intersections are predicted to operate with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of the critical movements identified under the 2041 future background conditions.

Select movements are expected to queue beyond the proposed storage length similar to the critical movements identified under 2031 and 2041 future background conditions. At the intersection of Trafalgar Road and Derry Road, the 95th percentile queue for the northbound left-turn movement is projected to queue beyond the proposed storage but is expected to be contained within the effective taper length and cleared within a single signal cycle, which is deemed acceptable.

Without Trafalgar GO Scenario

For all future total conditions without the Trafalgar GO Station, the study area is expected to experience an increase in movements that are predicted to be over capacity at the external intersections. This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the future total traffic conditions without the operation of the future GO Station, forcing residents and visitors to be auto dependent. It is recommended that the intersections be monitored to determine if the forecasted volumes will be realized in the future, especially if the future GO Station is not operable by then.

Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the broader Regional and Town road networks, it is expected that existing traffic may relocate to alternative routes.

Future Total Traffic 2031 Conditions – Without GO

Intersection / Road Improvement

No intersection / road improvements are being recommended under this scenario.

Analysis Summary

Under 2031 future total conditions, all external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of select movements at the intersections of Trafalgar Road at Derry Road, Britannia Road, and Lower Base Line.

All the arterial-to-collector intersections operate well with overall reserve capacity and no individual movements over capacity. Although some movements experience LOS F, the v/c ratio is less than 1.0 during both peak hours, indicating reserve capacity remains.

Future Total Traffic 2041 Conditions – Without GO

Intersection / Road Improvement

A dedicated northbound right-turn lane is recommended at the intersection of Trafalgar Road and Collector D and dedicated eastbound right and westbound right-turn lanes are recommended at the intersection of Derry Road and Collector K.

The Main Street Extension from Fifth Line to Trafalgar Road has been included under the 2041 horizon year, as noted previously.

Analysis Summary

Under 2041 future total conditions, all external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry

Road, Britannia Road, and Lower Base Line.

All the arterial-to-collector intersections operate well with overall reserve capacity and no individual movements over capacity with the exception of select movements at the intersections of Derry Road at Collector K and Trafalgar Road at Collector D.

Future Total Traffic 2051 Conditions – Without GO

Analysis Summary

Under 2051 future total conditions, all external intersections are predicted to generally operate well with overall reserve capacity and acceptable delays during both weekday a.m. and p.m. peak hours, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road, Britannia Road, and Lower Base Line.

All the arterial-to-collector intersections operate well with overall reserve capacity and no individual movements over capacity with the exception of select movements at the intersections of Derry Road at Collector J/Z-15 Access, Trafalgar Road at Collector F, and Trafalgar Road at Collector D.

Future Total Traffic 2041 Conditions – With GO

Analysis Summary

Under 2041 future total conditions with the GO Station, all the external intersections are expected to operate with some reserve capacity and acceptable delays, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road, Britannia Road, and Lower Base Line that are expected to operate above theoretical capacity. Several intersections in the study area are expected to perform at a Level of Service (LOS) "E" or better, even with their maximum volume.

In comparison to the 2041 future total conditions without the GO Station, the difference in results illustrates the impact a GO Station would have on the surrounding road network and the need for a GO Station to support the future intensification within the Agerton area under 2041 conditions. It is recommended that the intersections be monitored through the Draft Plan Traffic Impact Studies to determine if the forecasted volumes will be realized in the future. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the network, existing traffic may relocate to alternative routes.

Highly relevant for the need and desire for intensification is that a high volume of 2041 background traffic on the regional roads is through-traffic. Desired intensification in this area should not be prevented by through-traffic on the regional roads which dominates the vehicle counts. Some priority in the modelling should be attributed to future local traffic, leaving the through traffic to either accept longer trip durations or choose a different route, mode or time of travel.

This factor should be considered when interpreting the capacity results, as they represent conservative estimates of the 2041 and 2051 future total traffic conditions. It is recommended that

the intersections be monitored to determine if the forecasted volumes will be realized in the future.

Most of the arterial-to-collector intersections are expected to operate with reserve capacity, with most movements experiencing an LOS of 'E' or better under 2041 future total conditions. Some individual movements experience LOS 'F', however, these movements typically operate with reserve capacity. The higher delays (LOS 'E' and 'F') are due in part to relatively long cycle lengths of 140 seconds implemented along the Reginal corridors which inherently add delay to dedicated turning movements and vehicles on the minor approaches.

Future Total Traffic 2051 Conditions – With GO

Analysis Summary

Under 2051 future total conditions with the GO Station, all the external intersections are expected to operate with some reserve capacity and acceptable delays, with the exception of select movements at the intersections of Trafalgar Road at Main Street, Derry Road, Britannia Road, and Lower Base Line that are expected to operate above theoretical capacity. Several intersections in the study area are expected to perform at a Level of Service (LOS) "E" or better, even with their maximum volume. While these intersections may operate beyond theoretical capacity during peak hours, this is a typical scenario at the crossroads of two major arterials. Importantly, the traffic flow at these intersections is anticipated to return to manageable levels outside of peak periods.

For the intersections that are predicted to experience over-capacity movements under 2051 future total conditions with the GO Station it is recommended that the intersections be monitored through the Draft Plan Traffic Impact Studies to determine if the forecasted volumes will be realized in the future. Also, as the road network within the vicinity of the study area becomes busier, and as new linkages/alternative routes are created elsewhere in the network, existing traffic may relocate to alternative routes.

Most of the arterial-to-collector intersections are expected to operate with reserve capacity, with most movements experiencing an LOS of 'E' or better under 2051 future total conditions. Some individual movements experience LOS 'F', however, these movements typically operate with reserve capacity. The higher delays (LOS 'E' and 'F') are due in part to relatively long cycle lengths of 140 seconds implemented along the Reginal corridors which inherently add delay to dedicated turning movements and vehicles on the minor approaches. Although select movements at the intersections of Trafalgar Road at Collector F and Trafalgar Road at Collector D are expected to operate beyond capacity.

A dedicated eastbound right-turn lane at the intersection of Trafalgar Road and Main Street was recommended based on capacity constraints.

MTSA Collector-to-Collector Intersections

All internal collector-to-collector intersections are expected to operate with ample capacity and

minimal levels of delay, with no critical movements identified under future total (2031, 2041 and 2051) conditions with or without the Trafalgar GO Station.

Transportation Capacity Limit Assessment

TYLin evaluated the maximum population that can be supported prior to the commencement of Trafalgar GO Station operations, recognizing that development within the Agerton Secondary Plan Area will be guided by available transportation (including transit) capacity thresholds.

The 2041 intersection capacity analysis without GO Station scenario indicates that all study intersections are expected to operate near capacity (v/c ≈ 1.0). This reflects the threshold condition, encompassing 90% (12,690 people) of the projected MTSA population and 55% of projected employment within the Secondary Plan.

Estimated trips generated by the remaining 10% of population growth and 55% of employment were compared. The comparison indicates a difference of 2,088 trips in the a.m. peak and 1,543 trips in the p.m. peak. Considering that 55% employment represents a substantially higher estimated trip volume than the remaining 10% population growth, the difference is estimated to account for 10 years of additional growth. This approach is therefore considered conservative in assessing the network's capacity prior to the implementation of the GO Station. The results suggest that the proposed traffic network in 2051 could accommodate full residential build-out (100% population) in the absence of employment development.

Notwithstanding the above comparison estimates, development in the MTSA will be guided by transportation (including transit) and capacity thresholds. Understanding the MTSA is planned to accommodate a population of 14,100 people and considering the phased approach of population and employment growth between 2031 and 2051, it is TYLin's opinion that a maximum of 12,690 people (90% of the Secondary Plan target) can be accommodated before the Milton Trafalgar GO Station is in operation. This limit may be raised without an amendment to this Secondary Plan if a transportation study is conducted that supports additional population to the satisfaction of Halton Region and the Town of Milton.

This Addendum represents a planning-level transportation assessment prepared to evaluate network performance at interim stages up to conceptual full build-out conditions (2051 horizon) for the Agerton Secondary Plan Area. As individual development applications advance, site-specific Transportation Impact Studies (TIS) will be required in accordance with Halton Region and Town of Milton guidelines. These future studies will incorporate updated traffic data, refined land use statistics, finalized roadway designs, and any changes to surrounding network conditions. Accordingly, specific mitigation measures and intersection configurations identified herein may be refined through subsequent detailed review and agency coordination. A summary of anticipated geometric improvements and associated design horizons is included in the following table.

Arterial Geometric Improvements Summary

Int.	Improvement	Planned/Recommended	Scenario
Trafalgar Road & Hwy 401 WB Ramps	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
Trafalgar Road & Hwy 401 EB Ramps	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
Trafalgar Road & (Future) Main Street	Main Street extension (2 lanes/direction)	Planned	2041 FB
	Add EBL/WBL/NBL/SBL Turn Lanes	Recommended	2041 FB
	Add EBR Turn Lane	Recommended	2051 FT
Trafalgar Road & Derry Road	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
	Add EBT/WBT Lanes (HOV)	Planned	2031 FB
	Add NBR/WBR Turn Lanes	Planned	2031 FB
	Add EBL/NBL/SBL Dual Turn Lanes	Recommended	2031 FB
	Add WBL Dual Turn Lane	Recommended	2041 FB
Trafalgar Road & Britannia Road	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
	Modify EBT/WBT Lanes to HOV	Planned	2031 FB
	Add NBR/SBR Lanes	Planned	2031 FB
	Add NBL/SBL Dual Turn Lanes	Recommended	2041 FB
Trafalgar Road & Lower Base Line	Add NBT/SBT Lanes (HOV)	Planned	2031 FB
	Add NBR/SBR Lanes	Planned	2031 FB
	Add Dual SBL Turn Lane	Recommended	2041 FB
	Add EBT/WBT Lanes	Planned	2051 FB
	Add EBR/WBR Turn Lanes	Recommended	2051 FB
Eighth Line & Derry Road	Add EBT/WBT Lanes (HOV)	Planned	2031 FB
	Add EBR/WBR Turn Lanes	Planned	2031 FB
Eighth Line & Britannia Road	Modify EBT/WBT Lanes to HOV	Planned	2031 FB
	Add WBR Turn Lane	Planned	2031 FB

Appendix A Existing Traffic Data

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

Municipality: Milton
Site #: 2508500001
Intersection: Trafalgar Rd & HWY 401 WB Off R
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total:	1810			
North Entering:	1134			
North Peds:	0			
Peds Cross:	⋈			
Heavys	28	44	0	72
Trucks	4	25	0	29
Cars	85	948	0	1033
Totals	117	1017	0	
Heavys	93			
Trucks	19			
Cars	564			
Totals	676			
East Leg Total:	453			
East Entering:	453			
East Peds:	0			
Peds Cross:	⧖			

Trafalgar Rd

Heavys	Trucks	Cars	Totals
28	4	101	133

Trafalgar & 401 Commuter lot

Cars	Trucks	Heavys	Totals
233	11	36	280
6	0	0	6
129	8	30	167
368	19	66	

N
W E
S

Heavys	Trucks	Cars	Totals
0	0	0	0
0	0	0	0
0	0	4	4
0	0	4	

HWY 401 WB Off Ramp

Cars	Trucks	Heavys	Totals
0	0	0	0

Trafalgar Rd

Peds Cross:	⧖			
West Peds:	0			
West Entering:	4			
West Leg Total:	137			
Cars	1081			
Trucks	33			
Heavys	74			
Totals	1188			
Cars	10	331	0	341
Trucks	0	8	0	8
Heavys	0	57	0	57
Totals	10	396	0	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	406			
South Leg Total:	1594			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Milton
Site #: 2508500001
Intersection: Trafalgar Rd & HWY 401 WB Off R
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total:	2905			
North Entering:	701			
North Peds:	0			
Peds Cross:	⋈			

Heavys	9	30	0	39
Trucks	2	6	0	8
Cars	34	620	0	654
Totals	45	656	0	

Heavys	96
Trucks	21
Cars	2087
Totals	2204

East Leg Total:	1991
East Entering:	1991
East Peds:	0
Peds Cross:	⧖

Trafalgar Rd

Heavys	Trucks	Cars	Totals
9	2	66	77

Trafalgar & 401 Commuter lot

Cars	Trucks	Heavys	Totals
1327	14	55	1396
27	0	0	27
540	5	23	568
1894	19	78	

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W E
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Heavys	Trucks	Cars	Totals
0	0	17	17
0	0	0	0
0	0	14	14
0	0	31	

HWY 401 WB Off Ramp

Cars	Trucks	Heavys	Totals
0	0	0	0

Trafalgar Rd

Peds Cross:	⧖			
West Peds:	0			
West Entering:	31			
West Leg Total:	108			

Cars	1174			
Trucks	11			
Heavys	53			
Totals	1238			

Cars	5	743	0	748
Trucks	0	7	0	7
Heavys	0	41	0	41
Totals	5	791	0	

Peds Cross:	⋈			
South Peds:	0			
South Entering:	796			
South Leg Total:	2034			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

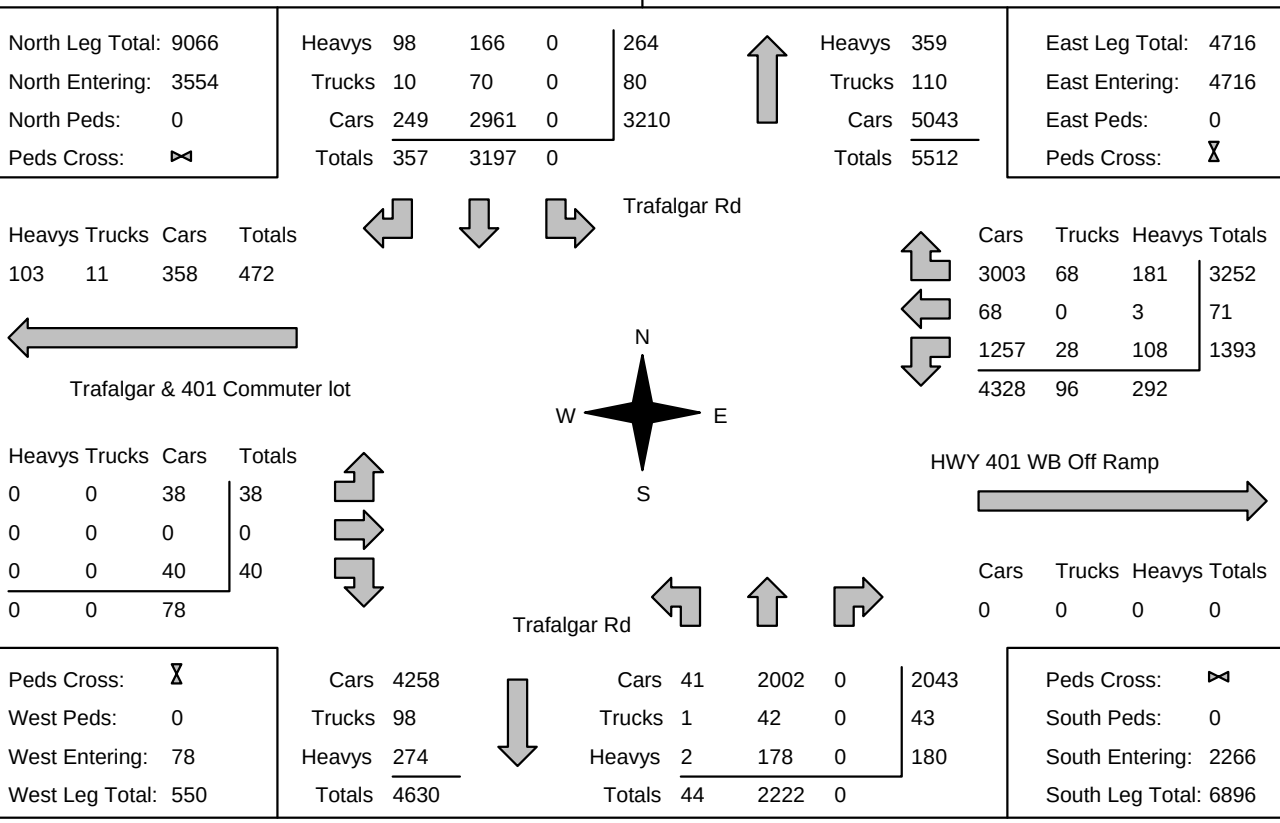
Municipality: Milton
Site #: 2508500001
Intersection: Trafalgar Rd & HWY 401 WB Off R
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Trafalgar Rd & HWY 401 WB Off | **Count Date:** 28-May-25 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*986*	*143*	*1129*	*0*
9:00:00	*0*	*925*	*105*	*1030*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*646*	*63*	*709*	*0*
18:00:00	*0*	*640*	*46*	*686*	*0*
Totals:	0	3197	357	3554	0

North/South Total Approaches: 5820

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*6*	*351*	*0*	*357*	*0*
9:00:00	*26*	*394*	*0*	*420*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*6*	*725*	*0*	*731*	*0*
18:00:00	*6*	*752*	*0*	*758*	*0*
S Totals:	44	2222	0	2266	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*158*	*7*	*285*	*450*	*0*
9:00:00	*173*	*15*	*326*	*514*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*480*	*30*	*1303*	*1813*	*0*
18:00:00	*582*	*19*	*1338*	*1939*	*0*
Totals:	1393	71	3252	4716	0

East/West Total Approaches: 4794

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*1*	*0*	*2*	*3*	*0*
9:00:00	*2*	*0*	*8*	*10*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*20*	*0*	*17*	*37*	*0*
18:00:00	*15*	*0*	*13*	*28*	*0*
W Totals:	38	0	40	78	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*166*	*190*	*0*	*530*	*616*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500001

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	190	190	25	25	0	0	5	5	2	2	0	0	15	15	14	14	0	0
7:30:00	0	0	422	232	51	26	0	0	14	9	3	1	0	0	25	10	25	11	0	0
7:45:00	0	0	690	268	75	24	0	0	23	9	4	1	0	0	33	8	34	9	0	0
8:00:00	0	0	919	229	97	22	0	0	29	6	5	1	0	0	38	5	41	7	0	0
8:15:00	0	0	1133	214	116	19	0	0	36	7	7	2	0	0	54	16	48	7	0	0
8:30:00	0	0	1370	237	136	20	0	0	39	3	7	0	0	0	69	15	53	5	0	0
8:45:00	0	0	1585	215	148	12	0	0	45	6	7	0	0	0	80	11	59	6	0	0
9:00:00	0	0	1764	179	165	17	0	0	50	5	7	0	0	0	97	17	76	17	0	0
9:15:00	0	0	1764	0	165	0	0	0	50	0	7	0	0	0	97	0	76	0	0	0
16:00:00	0	0	1764	0	165	0	0	0	50	0	7	0	0	0	97	0	76	0	0	0
16:15:00	0	0	1925	161	176	11	0	0	56	6	7	0	0	0	113	16	81	5	0	0
16:30:00	0	0	2071	146	195	19	0	0	59	3	8	1	0	0	123	10	83	2	0	0
16:45:00	0	0	2208	137	207	12	0	0	64	5	8	0	0	0	130	7	85	2	0	0
17:00:00	0	0	2354	146	216	9	0	0	66	2	9	1	0	0	137	7	86	1	0	0
17:15:00	0	0	2513	159	222	6	0	0	66	0	9	0	0	0	145	8	86	0	0	0
17:30:00	0	0	2695	182	230	8	0	0	69	3	9	0	0	0	157	12	91	5	0	0
17:45:00	0	0	2828	133	241	11	0	0	70	1	10	1	0	0	160	3	94	3	0	0
18:00:00	0	0	2961	133	249	8	0	0	70	0	10	0	0	0	166	6	98	4	0	0
18:15:00	0	0	2961	0	249	0	0	0	70	0	10	0	0	0	166	0	98	0	0	0
18:15:15	0	0	2961	0	249	0	0	0	70	0	10	0	0	0	166	0	98	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500001

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	29	29	2	2	66	66	1	1	0	0	7	7	4	4	0	0	10	10	0	0
7:30:00	63	34	3	1	116	50	4	3	0	0	11	4	8	4	0	0	21	11	0	0
7:45:00	91	28	4	1	166	50	6	2	0	0	14	3	17	9	0	0	31	10	0	0
8:00:00	125	34	7	3	229	63	8	2	0	0	18	4	25	8	0	0	38	7	0	0
8:15:00	161	36	8	1	284	55	10	2	0	0	20	2	31	6	0	0	48	10	0	0
8:30:00	192	31	9	1	349	65	12	2	0	0	22	2	38	7	0	0	57	9	0	0
8:45:00	228	36	14	5	415	66	15	3	0	0	23	1	41	3	0	0	66	9	0	0
9:00:00	263	35	21	7	513	98	18	3	0	0	26	3	50	9	1	1	72	6	0	0
9:15:00	263	0	21	0	513	0	18	0	0	0	26	0	50	0	1	0	72	0	0	0
16:00:00	263	0	21	0	513	0	18	0	0	0	26	0	50	0	1	0	72	0	0	0
16:15:00	364	101	25	4	829	316	20	2	0	0	35	9	62	12	1	0	89	17	0	0
16:30:00	479	115	33	8	1139	310	22	2	0	0	44	9	73	11	1	0	103	14	0	0
16:45:00	585	106	40	7	1433	294	23	1	0	0	50	6	79	6	2	1	114	11	0	0
17:00:00	702	117	50	10	1732	299	24	1	0	0	55	5	85	6	2	0	127	13	0	0
17:15:00	853	151	55	5	2090	358	27	3	0	0	58	3	93	8	2	0	140	13	0	0
17:30:00	990	137	61	6	2426	336	28	1	0	0	61	3	97	4	2	0	158	18	0	0
17:45:00	1125	135	67	6	2760	334	28	0	0	0	64	3	102	5	2	0	169	11	0	0
18:00:00	1257	132	68	1	3003	243	28	0	0	0	68	4	108	6	3	1	181	12	0	0
18:15:00	1257	0	68	0	3003	0	28	0	0	0	68	0	108	0	3	0	181	0	0	0
18:15:15	1257	0	68	0	3003	0	28	0	0	0	68	0	108	0	3	0	181	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500001

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	48	48	0	0	0	0	1	1	0	0	0	0	12	12	0	0	0	0
7:30:00	2	1	113	65	0	0	0	0	4	3	0	0	0	0	19	7	0	0	0	0
7:45:00	3	1	203	90	0	0	0	0	7	3	0	0	0	0	32	13	0	0	0	0
8:00:00	6	3	289	86	0	0	0	0	11	4	0	0	0	0	51	19	0	0	0	0
8:15:00	8	2	361	72	0	0	0	0	11	0	0	0	0	0	63	12	0	0	0	0
8:30:00	12	4	444	83	0	0	0	0	12	1	0	0	0	0	76	13	0	0	0	0
8:45:00	21	9	517	73	0	0	0	0	15	3	0	0	0	0	87	11	0	0	0	0
9:00:00	30	9	626	109	0	0	1	1	24	9	0	0	1	1	95	8	0	0	0	0
9:15:00	30	0	626	0	0	0	1	0	24	0	0	0	1	0	95	0	0	0	0	0
16:00:00	30	0	626	0	0	0	1	0	24	0	0	0	1	0	95	0	0	0	0	0
16:15:00	31	1	774	148	0	0	1	0	28	4	0	0	1	0	103	8	0	0	0	0
16:30:00	31	0	909	135	0	0	1	0	29	1	0	0	1	0	120	17	0	0	0	0
16:45:00	34	3	1089	180	0	0	1	0	34	5	0	0	1	0	133	13	0	0	0	0
17:00:00	36	2	1290	201	0	0	1	0	36	2	0	0	1	0	144	11	0	0	0	0
17:15:00	37	1	1462	172	0	0	1	0	39	3	0	0	1	0	155	11	0	0	0	0
17:30:00	38	1	1665	203	0	0	1	0	40	1	0	0	1	0	162	7	0	0	0	0
17:45:00	39	1	1832	167	0	0	1	0	41	1	0	0	1	0	174	12	0	0	0	0
18:00:00	41	2	2002	170	0	0	1	0	42	1	0	0	2	1	178	4	0	0	0	0
18:15:00	41	0	2002	0	0	0	1	0	42	0	0	0	2	0	178	0	0	0	0	0
18:15:15	41	0	2002	0	0	0	1	0	42	0	0	0	2	0	178	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500001

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	1	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	1	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	1	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	1	0	0	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	3	2	0	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	3	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	3	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	5	2	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	10	5	0	0	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	19	9	0	0	23	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	23	4	0	0	27	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	30	7	0	0	30	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	30	0	0	0	35	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	36	6	0	0	37	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	38	2	0	0	40	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	38	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	38	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:30:00
To: 8:30:00

Municipality: Milton
Site #: 2508500002
Intersection: Trafalgar Rd & HWY 401 EB Off Ra
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 1934
North Entering: 1187
North Peds: 0
Peds Cross: ⋈

Heavys	27	44	0	71
Trucks	15	16	0	31
Cars	643	442	0	1085
Totals	685	502	0	

Heavys	81
Trucks	21
Cars	645
Totals	747

East Leg Total: 653
East Entering: 0
East Peds: 0
Peds Cross: ⧖

Trafalgar Rd

Heavys	Trucks	Cars	Totals
27	15	643	685

HWY 401 EB Off Ramp

Heavys	Trucks	Cars	Totals
29	5	80	114
0	0	0	0
31	10	348	389
60	15	428	

Cars	Trucks	Heavys	Totals
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

N
W E
S

HWY 401 EB On Ramp

Cars	Trucks	Heavys	Totals
623	8	22	653

Trafalgar Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 503
West Leg Total: 1188

Cars	790
Trucks	26
Heavys	75
Totals	891

Cars	0	565	623	1188
Trucks	0	16	8	24
Heavys	0	52	22	74
Totals	0	633	653	

Peds Cross: ⋈
South Peds: 0
South Entering: 1286
South Leg Total: 2177

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

Municipality: Milton
Site #: 2508500002
Intersection: Trafalgar Rd & HWY 401 EB Off Ra
TFR File #: 1
Count date: 28-May-25

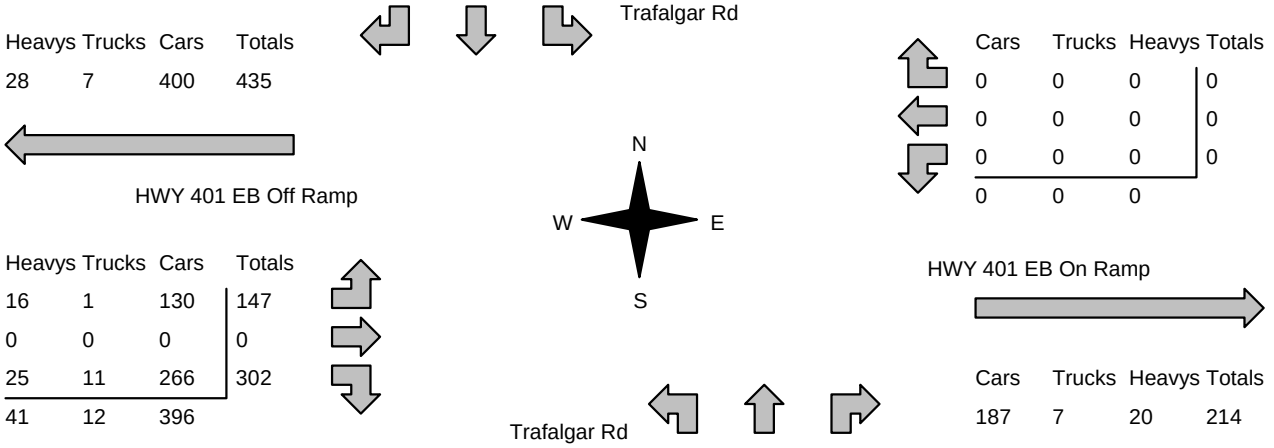
Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total:	2230			
North Entering:	1273			
North Peds:	0			
Peds Cross:	⋈			
Heavys	28	34	0	62
Trucks	7	8	0	15
Cars	400	796	0	1196
Totals	435	838	0	
Heavys	53			
Trucks	13			
Cars	891			
Totals	957			
East Leg Total:	214			
East Entering:	0			
East Peds:	0			
Peds Cross:	⧖			



Peds Cross:	⧖			
West Peds:	0			
West Entering:	449			
West Leg Total:	884			
Cars	1062			
Trucks	19			
Heavys	59			
Totals	1140			
Cars	0	761	187	948
Trucks	0	12	7	19
Heavys	0	37	20	57
Totals	0	810	214	
Peds Cross:	⋈			
South Peds:	0			
South Entering:	1024			
South Leg Total:	2164			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

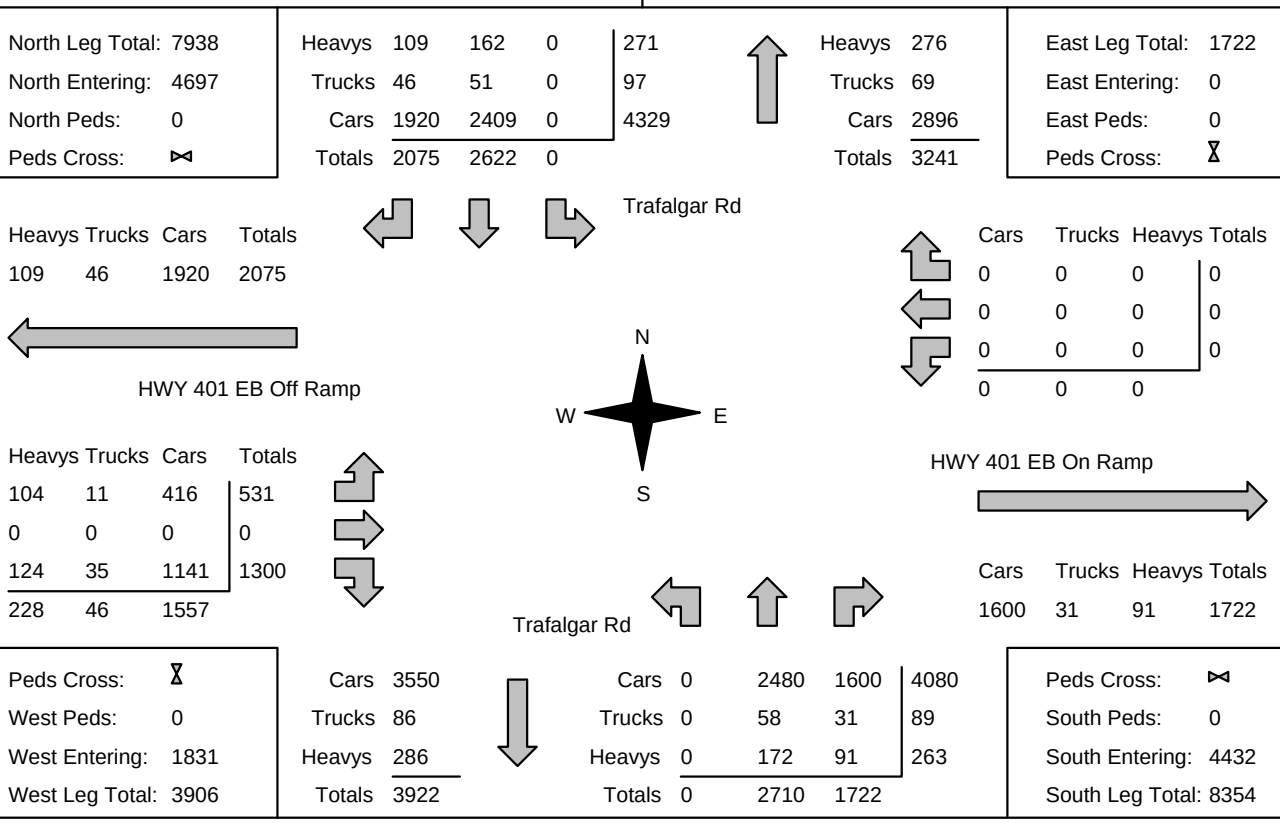
Municipality: Milton
Site #: 2508500002
Intersection: Trafalgar Rd & HWY 401 EB Off Ra
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Trafalgar Rd & HWY 401 EB Off R | **Count Date:** 28-May-25 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*481*	*659*	*1140*	*0*	*2303*
9:00:00	*0*	*521*	*593*	*1114*	*0*	*2390*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*737*	*428*	*1165*	*0*	*2166*
18:00:00	*0*	*883*	*395*	*1278*	*0*	*2270*
Totals:	0	2622	2075	4697	0	9129

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*555*	*608*	*1163*	*0*
9:00:00	*0*	*607*	*669*	*1276*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*760*	*241*	*1001*	*0*
18:00:00	*0*	*788*	*204*	*992*	*0*
S Totals:	0	2710	1722	4432	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*0*	*0*	*0*	*0*	*0*	*490*
9:00:00	*0*	*0*	*0*	*0*	*0*	*463*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*0*	*0*	*0*	*0*	*418*
18:00:00	*0*	*0*	*0*	*0*	*0*	*460*
Totals:	0	0	0	0	0	1831

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*109*	*0*	*381*	*490*	*0*
9:00:00	*107*	*0*	*356*	*463*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*168*	*0*	*250*	*418*	*0*
18:00:00	*147*	*0*	*313*	*460*	*0*
W Totals:	531	0	1300	1831	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*109*	*107*	*0*	*168*	*147*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500002

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	101	101	117	117	0	0	3	3	4	4	0	0	15	15	5	5	0	0
7:30:00	0	0	213	112	279	162	0	0	11	8	10	6	0	0	22	7	10	5	0	0
7:45:00	0	0	326	113	453	174	0	0	14	3	17	7	0	0	30	8	18	8	0	0
8:00:00	0	0	421	95	620	167	0	0	19	5	19	2	0	0	41	11	20	2	0	0
8:15:00	0	0	538	117	766	146	0	0	24	5	21	2	0	0	55	14	28	8	0	0
8:30:00	0	0	655	117	922	156	0	0	27	3	25	4	0	0	66	11	37	9	0	0
8:45:00	0	0	770	115	1062	140	0	0	30	3	31	6	0	0	72	6	44	7	0	0
9:00:00	0	0	882	112	1164	102	0	0	32	2	35	4	0	0	88	16	53	9	0	0
9:15:00	0	0	882	0	1164	0	0	0	32	0	35	0	0	0	88	0	53	0	0	0
16:00:00	0	0	882	0	1164	0	0	0	32	0	35	0	0	0	88	0	53	0	0	0
16:15:00	0	0	1038	156	1264	100	0	0	37	5	37	2	0	0	105	17	64	11	0	0
16:30:00	0	0	1212	174	1363	99	0	0	42	5	38	1	0	0	117	12	72	8	0	0
16:45:00	0	0	1376	164	1459	96	0	0	44	2	41	3	0	0	125	8	78	6	0	0
17:00:00	0	0	1561	185	1550	91	0	0	45	1	45	4	0	0	133	8	85	7	0	0
17:15:00	0	0	1772	211	1648	98	0	0	48	3	45	0	0	0	143	10	90	5	0	0
17:30:00	0	0	2008	236	1763	115	0	0	50	2	45	0	0	0	151	8	100	10	0	0
17:45:00	0	0	2187	179	1857	94	0	0	50	0	46	1	0	0	156	5	103	3	0	0
18:00:00	0	0	2409	222	1920	63	0	0	51	1	46	0	0	0	162	6	109	6	0	0
18:15:00	0	0	2409	0	1920	0	0	0	51	0	46	0	0	0	162	0	109	0	0	0
18:15:15	0	0	2409	0	1920	0	0	0	51	0	46	0	0	0	162	0	109	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500002

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500002

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	80	80	124	124	0	0	5	5	3	3	0	0	15	15	6	6	0	0
7:30:00	0	0	202	122	272	148	0	0	9	4	6	3	0	0	28	13	9	3	0	0
7:45:00	0	0	332	130	425	153	0	0	13	4	9	3	0	0	43	15	16	7	0	0
8:00:00	0	0	483	151	574	149	0	0	17	4	11	2	0	0	55	12	23	7	0	0
8:15:00	0	0	613	130	731	157	0	0	22	5	12	1	0	0	69	14	26	3	0	0
8:30:00	0	0	767	154	895	164	0	0	25	3	14	2	0	0	80	11	31	5	0	0
8:45:00	0	0	893	126	1068	173	0	0	29	4	15	1	0	0	92	12	35	4	0	0
9:00:00	0	0	1027	134	1220	152	0	0	37	8	16	1	0	0	98	6	41	6	0	0
9:15:00	0	0	1027	0	1220	0	0	0	37	0	16	0	0	0	98	0	41	0	0	0
16:00:00	0	0	1027	0	1220	0	0	0	37	0	16	0	0	0	98	0	41	0	0	0
16:15:00	0	0	1190	163	1271	51	0	0	42	5	19	3	0	0	109	11	50	9	0	0
16:30:00	0	0	1351	161	1318	47	0	0	44	2	21	2	0	0	121	12	62	12	0	0
16:45:00	0	0	1534	183	1366	48	0	0	50	6	25	4	0	0	134	13	70	8	0	0
17:00:00	0	0	1730	196	1417	51	0	0	52	2	26	1	0	0	140	6	75	5	0	0
17:15:00	0	0	1914	184	1464	47	0	0	55	3	26	0	0	0	149	9	79	4	0	0
17:30:00	0	0	2112	198	1505	41	0	0	56	1	28	2	0	0	158	9	82	3	0	0
17:45:00	0	0	2294	182	1555	50	0	0	57	1	30	2	0	0	167	9	88	6	0	0
18:00:00	0	0	2480	186	1600	45	0	0	58	1	31	1	0	0	172	5	91	3	0	0
18:15:00	0	0	2480	0	1600	0	0	0	58	0	31	0	0	0	172	0	91	0	0	0
18:15:15	0	0	2480	0	1600	0	0	0	58	0	31	0	0	0	172	0	91	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500002

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	18	18	0	0	68	68	0	0	0	0	2	2	5	5	0	0	11	11	0	0
7:30:00	42	24	0	0	166	98	0	0	0	0	4	2	9	4	0	0	18	7	0	0
7:45:00	64	22	0	0	248	82	2	2	0	0	7	3	13	4	0	0	28	10	0	0
8:00:00	80	16	0	0	338	90	4	2	0	0	8	1	25	12	0	0	35	7	0	0
8:15:00	100	20	0	0	432	94	4	0	0	0	11	3	30	5	0	0	44	9	0	0
8:30:00	122	22	0	0	514	82	5	1	0	0	14	3	38	8	0	0	49	5	0	0
8:45:00	137	15	0	0	591	77	7	2	0	0	15	1	46	8	0	0	54	5	0	0
9:00:00	155	18	0	0	656	65	8	1	0	0	17	2	53	7	0	0	64	10	0	0
9:15:00	155	0	0	0	656	0	8	0	0	0	17	0	53	0	0	0	64	0	0	0
16:00:00	155	0	0	0	656	0	8	0	0	0	17	0	53	0	0	0	64	0	0	0
16:15:00	183	28	0	0	701	45	10	2	0	0	19	2	59	6	0	0	75	11	0	0
16:30:00	219	36	0	0	751	50	10	0	0	0	22	3	74	15	0	0	80	5	0	0
16:45:00	263	44	0	0	813	62	11	1	0	0	25	3	77	3	0	0	86	6	0	0
17:00:00	291	28	0	0	867	54	11	0	0	0	28	3	82	5	0	0	92	6	0	0
17:15:00	318	27	0	0	939	72	11	0	0	0	32	4	87	5	0	0	100	8	0	0
17:30:00	349	31	0	0	1017	78	11	0	0	0	33	1	90	3	0	0	105	5	0	0
17:45:00	384	35	0	0	1081	64	11	0	0	0	34	1	99	9	0	0	116	11	0	0
18:00:00	416	32	0	0	1141	60	11	0	0	0	35	1	104	5	0	0	124	8	0	0
18:15:00	416	0	0	0	1141	0	11	0	0	0	35	0	104	0	0	0	124	0	0	0
18:15:15	416	0	0	0	1141	0	11	0	0	0	35	0	104	0	0	0	124	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

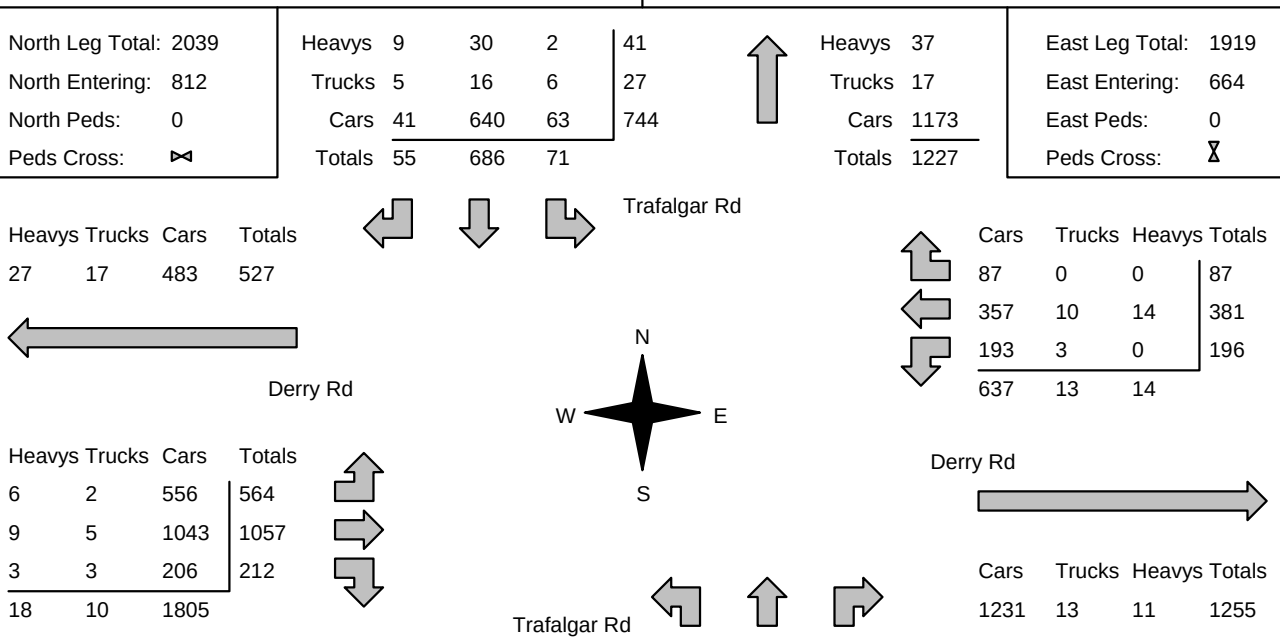
Municipality: Milton
Site #: 2508500003
Intersection: Derry Rd & Trafalgar Rd
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Milton
Site #: 2508500003
Intersection: Derry Rd & Trafalgar Rd
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E

North Leg Total:	1988
North Entering:	1084
North Peds:	0
Peds Cross:	⋈

Heavys	5	25	0	30
Trucks	1	11	1	13
Cars	395	573	73	1041
Totals	401	609	74	

Heavys	34
Trucks	12
Cars	858
Totals	904

East Leg Total:	2262
East Entering:	1531
East Peds:	0
Peds Cross:	⧖

Trafalgar Rd

Heavys	Trucks	Cars	Totals
14	7	1899	1920

Derry Rd

Cars	Trucks	Heavys	Totals
56	0	1	57
1261	4	5	1270
203	1	0	204
1520	5	6	

N
W E
S

Heavys	Trucks	Cars	Totals
4	2	119	125
5	7	536	548
3	2	131	136
12	11	786	

Derry Rd

Cars	Trucks	Heavys	Totals
716	10	5	731

Trafalgar Rd

Peds Cross:	⧖
West Peds:	0
West Entering:	809
West Leg Total:	2729

Cars	907
Trucks	14
Heavys	28
Totals	949

Cars	243	683	107	1033
Trucks	2	10	2	14
Heavys	4	29	0	33
Totals	249	722	109	

Peds Cross:	⋈
South Peds:	0
South Entering:	1080
South Leg Total:	2029

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

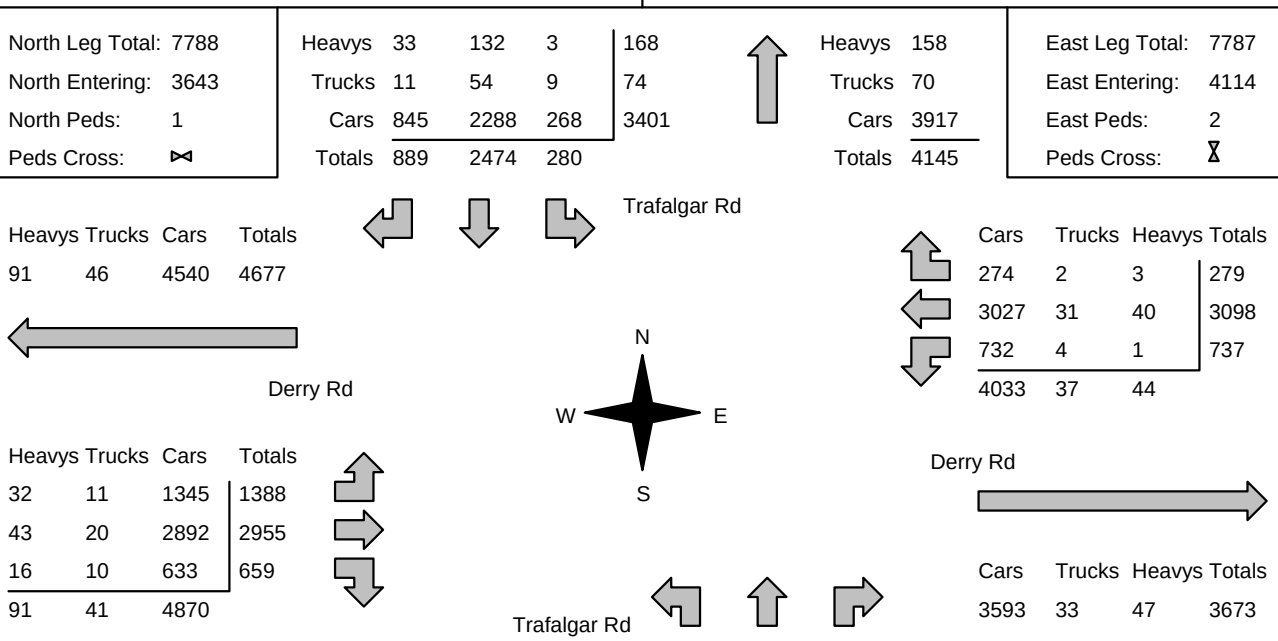
Municipality: Milton
Site #: 2508500003
Intersection: Derry Rd & Trafalgar Rd
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Derry Rd & Trafalgar Rd | **Count Date:** 28-May-25 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*68*	*657*	*76*	*801*	*0*	*1483*
9:00:00	*54*	*656*	*43*	*753*	*0*	*1549*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*82*	*521*	*342*	*945*	*1*	*1989*
18:00:00	*76*	*640*	*428*	*1144*	*0*	*2228*
Totals:	280	2474	889	3643	1	7249

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*81*	*516*	*85*	*682*	*0*
9:00:00	*107*	*556*	*133*	*796*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*262*	*680*	*102*	*1044*	*0*
18:00:00	*240*	*726*	*118*	*1084*	*0*
S Totals:	690	2478	438	3606	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*126*	*345*	*91*	*562*	*0*	*2182*
9:00:00	*211*	*386*	*79*	*676*	*0*	*2467*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*200*	*1182*	*53*	*1435*	*2*	*2232*
18:00:00	*200*	*1185*	*56*	*1441*	*0*	*2235*
Totals:	737	3098	279	4114	2	9116

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*518*	*910*	*192*	*1620*	*0*
9:00:00	*573*	*1000*	*218*	*1791*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*163*	*516*	*118*	*797*	*0*
18:00:00	*134*	*529*	*131*	*794*	*0*
W Totals:	1388	2955	659	5002	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*806*	*817*	*0*	*1026*	*1042*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500003

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	13	13	130	130	16	16	0	0	4	4	0	0	1	1	16	16	1	1	0	0
7:30:00	21	8	277	147	32	16	0	0	8	4	0	0	1	0	27	11	6	5	0	0
7:45:00	40	19	432	155	47	15	2	2	10	2	1	1	1	0	35	8	8	2	0	0
8:00:00	62	22	598	166	63	16	4	2	18	8	2	1	2	1	41	6	11	3	0	0
8:15:00	72	10	756	158	71	8	4	0	22	4	2	0	3	1	53	12	13	2	0	0
8:30:00	86	14	919	163	79	8	6	2	25	3	5	3	3	0	59	6	16	3	0	0
8:45:00	103	17	1072	153	88	9	8	2	26	1	6	1	3	0	65	6	17	1	0	0
9:00:00	111	8	1207	135	95	7	8	0	28	2	6	0	3	0	78	13	18	1	0	0
9:15:00	111	0	1207	0	95	0	8	0	28	0	6	0	3	0	78	0	18	0	0	0
16:00:00	111	0	1207	0	95	0	8	0	28	0	6	0	3	0	78	0	18	0	0	0
16:15:00	131	20	1335	128	165	70	8	0	32	4	9	3	3	0	87	9	22	4	0	0
16:30:00	150	19	1450	115	248	83	8	0	37	5	10	1	3	0	97	10	23	1	1	1
16:45:00	171	21	1565	115	343	95	8	0	41	4	10	0	3	0	99	2	24	1	1	0
17:00:00	193	22	1684	119	426	83	8	0	45	4	10	0	3	0	105	6	25	1	1	0
17:15:00	211	18	1833	149	541	115	9	1	49	4	10	0	3	0	112	7	27	2	1	0
17:30:00	227	16	1991	158	652	111	9	0	51	2	11	1	3	0	118	6	28	1	1	0
17:45:00	244	17	2138	147	738	86	9	0	52	1	11	0	3	0	124	6	29	1	1	0
18:00:00	268	24	2288	150	845	107	9	0	54	2	11	0	3	0	132	8	33	4	1	0
18:15:00	268	0	2288	0	845	0	9	0	54	0	11	0	3	0	132	0	33	0	1	0
18:15:15	268	0	2288	0	845	0	9	0	54	0	11	0	3	0	132	0	33	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500003

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	37	37	68	68	22	22	0	0	1	1	0	0	1	1	4	4	0	0	0	0
7:30:00	55	18	140	72	41	19	0	0	2	1	0	0	1	0	6	2	1	1	0	0
7:45:00	95	40	247	107	66	25	0	0	4	2	1	1	1	0	8	2	1	0	0	0
8:00:00	125	30	325	78	89	23	0	0	8	4	1	0	1	0	12	4	1	0	0	0
8:15:00	170	45	420	95	115	26	1	1	9	1	1	0	1	0	16	4	1	0	0	0
8:30:00	234	64	512	92	137	22	2	1	11	2	1	0	1	0	19	3	1	0	0	0
8:45:00	288	54	604	92	153	16	3	1	14	3	1	0	1	0	22	3	1	0	0	0
9:00:00	333	45	688	84	168	15	3	0	18	4	1	0	1	0	25	3	1	0	0	0
9:15:00	333	0	688	0	168	0	3	0	18	0	1	0	1	0	25	0	1	0	0	0
16:00:00	333	0	688	0	168	0	3	0	18	0	1	0	1	0	25	0	1	0	0	0
16:15:00	375	42	937	249	177	9	3	0	22	4	2	1	1	0	28	3	1	0	0	0
16:30:00	425	50	1228	291	188	11	3	0	24	2	2	0	1	0	31	3	1	0	1	1
16:45:00	477	52	1504	276	201	13	3	0	27	3	2	0	1	0	33	2	1	0	2	1
17:00:00	532	55	1849	345	220	19	4	1	28	1	2	0	1	0	36	3	1	0	2	0
17:15:00	570	38	2148	299	231	11	4	0	29	1	2	0	1	0	36	0	1	0	2	0
17:30:00	622	52	2468	320	243	12	4	0	29	0	2	0	1	0	38	2	2	1	2	0
17:45:00	680	58	2765	297	257	14	4	0	31	2	2	0	1	0	38	0	2	0	2	0
18:00:00	732	52	3027	262	274	17	4	0	31	0	2	0	1	0	40	2	3	1	2	0
18:15:00	732	0	3027	0	274	0	4	0	31	0	2	0	1	0	40	0	3	0	2	0
18:15:15	732	0	3027	0	274	0	4	0	31	0	2	0	1	0	40	0	3	0	2	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500003

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	15	15	61	61	15	15	0	0	3	3	0	0	2	2	9	9	0	0	0	0
7:30:00	39	24	199	138	36	21	0	0	8	5	0	0	2	0	17	8	0	0	0	0
7:45:00	64	25	312	113	63	27	0	0	13	5	0	0	2	0	27	10	0	0	0	0
8:00:00	78	14	462	150	84	21	0	0	18	5	1	1	3	1	36	9	0	0	0	0
8:15:00	98	20	579	117	106	22	0	0	19	1	1	0	3	0	43	7	0	0	0	0
8:30:00	125	27	710	131	153	47	0	0	24	5	2	1	5	2	50	7	0	0	0	0
8:45:00	149	24	842	132	188	35	2	2	28	4	2	0	6	1	58	8	0	0	0	0
9:00:00	177	28	977	135	216	28	2	0	35	7	2	0	9	3	60	2	0	0	0	0
9:15:00	177	0	977	0	216	0	2	0	35	0	2	0	9	0	60	0	0	0	0	0
16:00:00	177	0	977	0	216	0	2	0	35	0	2	0	9	0	60	0	0	0	0	0
16:15:00	237	60	1129	152	239	23	2	0	38	3	2	0	12	3	70	10	0	0	0	0
16:30:00	299	62	1271	142	260	21	2	0	40	2	2	0	12	0	78	8	1	1	0	0
16:45:00	368	69	1438	167	287	27	2	0	45	5	2	0	13	1	91	13	1	0	0	0
17:00:00	435	67	1608	170	317	30	2	0	47	2	2	0	13	0	97	6	1	0	0	0
17:15:00	498	63	1782	174	342	25	4	2	49	2	3	1	14	1	105	8	1	0	0	0
17:30:00	557	59	1957	175	373	31	4	0	52	3	4	1	15	1	114	9	1	0	0	0
17:45:00	611	54	2121	164	394	21	4	0	55	3	4	0	17	2	120	6	1	0	0	0
18:00:00	668	57	2298	177	433	39	4	0	57	2	4	0	18	1	123	3	1	0	0	0
18:15:00	668	0	2298	0	433	0	4	0	57	0	4	0	18	0	123	0	1	0	0	0
18:15:15	668	0	2298	0	433	0	4	0	57	0	4	0	18	0	123	0	1	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500003

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	104	104	158	158	37	37	0	0	1	1	2	2	3	3	5	5	1	1	0	0
7:30:00	255	151	368	210	83	46	0	0	2	1	2	0	4	1	8	3	3	2	0	0
7:45:00	387	132	631	263	138	55	0	0	2	0	2	0	6	2	10	2	5	2	0	0
8:00:00	508	121	894	263	184	46	0	0	3	1	2	0	10	4	13	3	6	1	0	0
8:15:00	652	144	1168	274	238	54	0	0	4	1	3	1	10	0	17	4	7	1	0	0
8:30:00	784	132	1429	261	282	44	1	1	4	0	4	1	11	1	18	1	8	1	0	0
8:45:00	943	159	1674	245	344	62	2	1	7	3	5	1	12	1	19	1	8	0	0	0
9:00:00	1076	133	1881	207	393	49	2	0	8	1	7	2	13	1	21	2	10	2	0	0
9:15:00	1076	0	1881	0	393	0	2	0	8	0	7	0	13	0	21	0	10	0	0	0
16:00:00	1076	0	1881	0	393	0	2	0	8	0	7	0	13	0	21	0	10	0	0	0
16:15:00	1111	35	2017	136	411	18	5	3	12	4	7	0	18	5	23	2	10	0	0	0
16:30:00	1152	41	2136	119	431	20	7	2	13	1	7	0	23	5	32	9	12	2	0	0
16:45:00	1195	43	2245	109	465	34	9	2	13	0	8	1	25	2	35	3	13	1	0	0
17:00:00	1216	21	2374	129	504	39	10	1	15	2	9	1	28	3	37	2	15	2	0	0
17:15:00	1247	31	2505	131	535	31	10	0	18	3	9	0	28	0	38	1	15	0	0	0
17:30:00	1278	31	2658	153	570	35	11	1	20	2	9	0	29	1	39	1	16	1	0	0
17:45:00	1314	36	2781	123	596	26	11	0	20	0	10	1	29	0	40	1	16	0	0	0
18:00:00	1345	31	2892	111	633	37	11	0	20	0	10	0	32	3	43	3	16	0	0	0
18:15:00	1345	0	2892	0	633	0	11	0	20	0	10	0	32	0	43	0	16	0	0	0
18:15:15	1345	0	2892	0	633	0	11	0	20	0	10	0	32	0	43	0	16	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Milton
Site #: 2508500004
Intersection: Trafalgar Rd & Britannia Rd
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 1881
North Entering: 1055
North Peds: 0
Peds Cross: ⋈

Heavys	9	31	2	42
Trucks	2	14	2	18
Cars	54	913	28	995
Totals	65	958	32	

Heavys	27
Trucks	16
Cars	783
Totals	826

East Leg Total: 1186
East Entering: 449
East Peds: 0
Peds Cross: ⧖

Trafalgar Rd

Heavys	Trucks	Cars	Totals
30	7	402	439

Britannia Rd

Cars	Trucks	Heavys	Totals
62	0	0	62
239	2	7	248
138	0	1	139
439	2	8	

N
W E
S

Heavys	Trucks	Cars	Totals
3	2	114	119
7	7	536	550
12	1	268	281
22	10	918	

Britannia Rd

Cars	Trucks	Heavys	Totals
717	11	9	737

Trafalgar Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 950
West Leg Total: 1389

Cars	1319
Trucks	15
Heavys	44
Totals	1378

Cars	109	607	153	869
Trucks	3	14	2	19
Heavys	14	24	0	38
Totals	126	645	155	

Peds Cross: ⋈
South Peds: 0
South Entering: 926
South Leg Total: 2304

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Milton
Site #: 2508500004
Intersection: Trafalgar Rd & Britannia Rd
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total:	2005			
North Entering:	942			
North Peds:	0			
Peds Cross:	⋈			

Heavys	5	19	2	26
Trucks	2	14	1	17
Cars	175	667	57	899
Totals	182	700	60	

Heavys	34
Trucks	14
Cars	1015
Totals	1063

East Leg Total:	1396
East Entering:	796
East Peds:	0
Peds Cross:	⧖

Trafalgar Rd

Heavys	Trucks	Cars	Totals
10	6	1100	1116

Britannia Rd

Cars	Trucks	Heavys	Totals
71	2	2	75
602	3	2	607
114	0	0	114
787	5	4	

N
W E
S

Heavys	Trucks	Cars	Totals
10	3	71	84
6	4	405	415
4	0	142	146
20	7	618	

Britannia Rd

Cars	Trucks	Heavys	Totals
585	7	8	600

Trafalgar Rd

Peds Cross:	⧖			
West Peds:	0			
West Entering:	645			
West Leg Total:	1761			

Cars	923			
Trucks	14			
Heavys	23			
Totals	960			

Cars	323	873	123	1319
Trucks	1	9	2	12
Heavys	3	22	0	25
Totals	327	904	125	

Peds Cross:	⋈			
South Peds:	0			
South Entering:	1356			
South Leg Total:	2316			

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

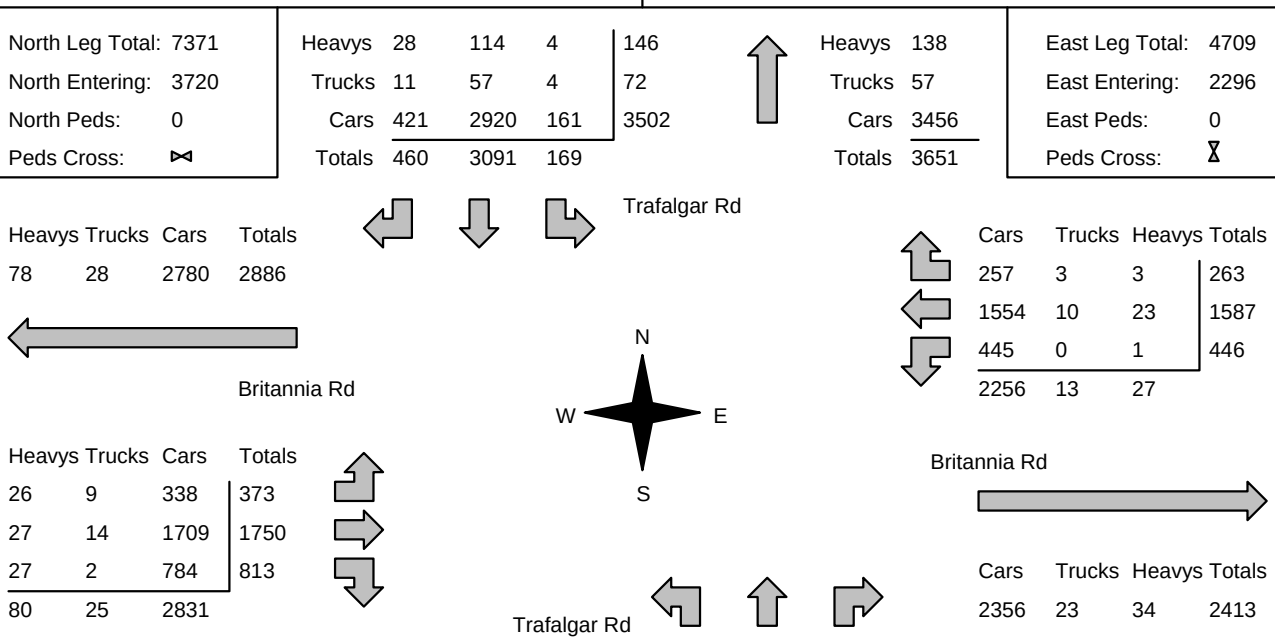
Municipality: Milton
Site #: 2508500004
Intersection: Trafalgar Rd & Britannia Rd
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Trafalgar Rd & Britannia Rd | **Count Date:** 28-May-25 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*34*	*831*	*50*	*915*	*0*	*1639*
9:00:00	*32*	*958*	*65*	*1055*	*0*	*1981*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*38*	*599*	*158*	*795*	*0*	*2116*
18:00:00	*65*	*703*	*187*	*955*	*0*	*2332*
Totals:	169	3091	460	3720	0	8068

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*97*	*560*	*67*	*724*	*0*
9:00:00	*126*	*645*	*155*	*926*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*305*	*887*	*129*	*1321*	*0*
18:00:00	*311*	*923*	*143*	*1377*	*0*
S Totals:	839	3015	494	4348	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*87*	*199*	*58*	*344*	*0*	*1105*
9:00:00	*139*	*248*	*62*	*449*	*0*	*1399*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*102*	*545*	*70*	*717*	*0*	*1330*
18:00:00	*118*	*595*	*73*	*786*	*0*	*1398*
Totals:	446	1587	263	2296	0	5232

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*86*	*397*	*278*	*761*	*0*
9:00:00	*119*	*550*	*281*	*950*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*93*	*385*	*135*	*613*	*0*
18:00:00	*75*	*418*	*119*	*612*	*0*
W Totals:	373	1750	813	2936	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*570*	*808*	*0*	*740*	*788*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500004

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	5	5	159	159	12	12	0	0	6	6	0	0	0	0	13	13	4	4	0	0
7:30:00	16	11	340	181	23	11	0	0	9	3	3	3	0	0	28	15	5	1	0	0
7:45:00	22	6	562	222	33	10	0	0	10	1	3	0	0	0	35	7	6	1	0	0
8:00:00	34	12	775	213	38	5	0	0	16	6	5	2	0	0	40	5	7	1	0	0
8:15:00	44	10	997	222	52	14	0	0	21	5	6	1	1	1	50	10	9	2	0	0
8:30:00	51	7	1221	224	65	13	1	1	23	2	7	1	1	0	57	7	10	1	0	0
8:45:00	55	4	1464	243	72	7	1	0	27	4	7	0	2	1	59	2	13	3	0	0
9:00:00	62	7	1688	224	92	20	2	1	30	3	7	0	2	0	71	12	16	3	0	0
9:15:00	62	0	1688	0	92	0	2	0	30	0	7	0	2	0	71	0	16	0	0	0
16:00:00	62	0	1688	0	92	0	2	0	30	0	7	0	2	0	71	0	16	0	0	0
16:15:00	68	6	1836	148	127	35	3	1	34	4	7	0	2	0	75	4	21	5	0	0
16:30:00	82	14	1971	135	173	46	3	0	38	4	8	1	2	0	86	11	23	2	0	0
16:45:00	88	6	2092	121	205	32	3	0	41	3	9	1	2	0	89	3	23	0	0	0
17:00:00	98	10	2250	158	239	34	3	0	47	6	10	1	3	1	91	2	24	1	0	0
17:15:00	115	17	2412	162	285	46	3	0	50	3	11	1	3	0	97	6	25	1	0	0
17:30:00	132	17	2592	180	332	47	4	1	53	3	11	0	3	0	104	7	27	2	0	0
17:45:00	145	13	2759	167	380	48	4	0	55	2	11	0	4	1	108	4	28	1	0	0
18:00:00	161	16	2920	161	421	41	4	0	57	2	11	0	4	0	114	6	28	0	0	0
18:15:00	161	0	2920	0	421	0	4	0	57	0	11	0	4	0	114	0	28	0	0	0
18:15:15	161	0	2920	0	421	0	4	0	57	0	11	0	4	0	114	0	28	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500004

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	17	17	37	37	10	10	0	0	1	1	0	0	0	0	6	6	0	0	0	0
7:30:00	36	19	84	47	25	15	0	0	1	0	0	0	0	0	6	0	0	0	0	0
7:45:00	61	25	136	52	41	16	0	0	2	1	1	1	0	0	6	0	0	0	0	0
8:00:00	87	26	188	52	57	16	0	0	4	2	1	0	0	0	7	1	0	0	0	0
8:15:00	122	35	246	58	73	16	0	0	4	0	1	0	0	0	9	2	0	0	0	0
8:30:00	155	33	300	54	86	13	0	0	4	0	1	0	0	0	12	3	0	0	0	0
8:45:00	195	40	362	62	98	12	0	0	6	2	1	0	1	1	13	1	0	0	0	0
9:00:00	225	30	427	65	119	21	0	0	6	0	1	0	1	0	14	1	0	0	0	0
9:15:00	225	0	427	0	119	0	0	0	6	0	1	0	1	0	14	0	0	0	0	0
16:00:00	225	0	427	0	119	0	0	0	6	0	1	0	1	0	14	0	0	0	0	0
16:15:00	248	23	551	124	135	16	0	0	6	0	1	0	1	0	16	2	1	1	0	0
16:30:00	270	22	662	111	152	17	0	0	6	0	1	0	1	0	19	3	1	0	0	0
16:45:00	300	30	808	146	168	16	0	0	7	1	1	0	1	0	21	2	1	0	0	0
17:00:00	327	27	962	154	184	16	0	0	8	1	3	2	1	0	22	1	3	2	0	0
17:15:00	358	31	1116	154	204	20	0	0	10	2	3	0	1	0	22	0	3	0	0	0
17:30:00	388	30	1269	153	226	22	0	0	10	0	3	0	1	0	23	1	3	0	0	0
17:45:00	414	26	1410	141	239	13	0	0	10	0	3	0	1	0	23	0	3	0	0	0
18:00:00	445	31	1554	144	257	18	0	0	10	0	3	0	1	0	23	0	3	0	0	0
18:15:00	445	0	1554	0	257	0	0	0	10	0	3	0	1	0	23	0	3	0	0	0
18:15:15	445	0	1554	0	257	0	0	0	10	0	3	0	1	0	23	0	3	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500004

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	14	14	88	88	9	9	0	0	3	3	0	0	1	1	8	8	0	0	0	0
7:30:00	37	23	250	162	24	15	0	0	6	3	0	0	4	3	16	8	0	0	0	0
7:45:00	59	22	378	128	41	17	2	2	10	4	1	1	7	3	22	6	0	0	0	0
8:00:00	87	28	515	137	66	25	3	1	14	4	1	0	7	0	31	9	0	0	0	0
8:15:00	108	21	666	151	105	39	3	0	15	1	1	0	9	2	37	6	0	0	0	0
8:30:00	136	28	830	164	147	42	5	2	19	4	1	0	13	4	46	9	0	0	0	0
8:45:00	157	21	977	147	179	32	5	0	22	3	2	1	18	5	49	3	0	0	0	0
9:00:00	196	39	1122	145	219	40	6	1	28	6	3	1	21	3	55	6	0	0	0	0
9:15:00	196	0	1122	0	219	0	6	0	28	0	3	0	21	0	55	0	0	0	0	0
16:00:00	196	0	1122	0	219	0	6	0	28	0	3	0	21	0	55	0	0	0	0	0
16:15:00	278	82	1314	192	252	33	6	0	29	1	3	0	22	1	65	10	0	0	0	0
16:30:00	335	57	1512	198	281	29	6	0	31	2	3	0	22	0	72	7	2	2	0	0
16:45:00	414	79	1750	238	317	36	6	0	34	3	3	0	24	2	84	12	3	1	0	0
17:00:00	498	84	1969	219	344	27	6	0	35	1	4	1	24	0	88	4	3	0	0	0
17:15:00	583	85	2187	218	375	31	7	1	37	2	4	0	26	2	94	6	3	0	0	0
17:30:00	660	77	2413	226	403	28	7	0	40	3	5	1	27	1	100	6	3	0	0	0
17:45:00	737	77	2623	210	440	37	7	0	43	3	5	0	27	0	106	6	3	0	0	0
18:00:00	805	68	2861	238	486	46	7	0	45	2	5	0	27	0	109	3	3	0	0	0
18:15:00	805	0	2861	0	486	0	7	0	45	0	5	0	27	0	109	0	3	0	0	0
18:15:15	805	0	2861	0	486	0	7	0	45	0	5	0	27	0	109	0	3	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500004

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	17	17	68	68	55	55	0	0	0	0	0	0	0	0	1	1	1	1	0	0
7:30:00	31	14	140	72	121	66	0	0	0	0	0	0	1	1	5	4	1	0	0	0
7:45:00	56	25	238	98	202	81	0	0	0	0	0	0	2	1	8	3	1	0	0	0
8:00:00	81	25	387	149	272	70	0	0	0	0	0	0	5	3	10	2	6	5	0	0
8:15:00	105	24	530	143	342	70	0	0	0	0	0	0	6	1	13	3	9	3	0	0
8:30:00	139	34	668	138	404	62	2	2	2	2	0	0	6	0	14	1	12	3	0	0
8:45:00	167	28	802	134	481	77	2	0	3	1	1	1	8	2	15	1	13	1	0	0
9:00:00	195	28	923	121	540	59	2	0	7	4	1	0	8	0	17	2	18	5	0	0
9:15:00	195	0	923	0	540	0	2	0	7	0	1	0	8	0	17	0	18	0	0	0
16:00:00	195	0	923	0	540	0	2	0	7	0	1	0	8	0	17	0	18	0	0	0
16:15:00	210	15	1002	79	570	30	4	2	7	0	1	0	10	2	18	1	20	2	0	0
16:30:00	227	17	1088	86	604	34	4	0	8	1	1	0	12	2	20	2	22	2	0	0
16:45:00	253	26	1180	92	631	27	6	2	10	2	1	0	15	3	20	0	23	1	0	0
17:00:00	275	22	1299	119	670	39	6	0	10	0	1	0	17	2	23	3	23	0	0	0
17:15:00	288	13	1386	87	704	34	6	0	13	3	1	0	20	3	23	0	27	4	0	0
17:30:00	305	17	1501	115	732	28	9	3	14	1	1	0	25	5	25	2	27	0	0	0
17:45:00	324	19	1585	84	773	41	9	0	14	0	1	0	25	0	26	1	27	0	0	0
18:00:00	338	14	1709	124	784	11	9	0	14	0	2	1	26	1	27	1	27	0	0	0
18:15:00	338	0	1709	0	784	0	9	0	14	0	2	0	26	0	27	0	27	0	0	0
18:15:15	338	0	1709	0	784	0	9	0	14	0	2	0	26	0	27	0	27	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

Municipality: Milton
Site #: 2508500005
Intersection: Trafalgar Rd & Lower Base Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total:	2367
North Entering:	1415
North Peds:	0
Peds Cross:	⋈

Heavys	1	33	4	38
Trucks	1	15	1	17
Cars	43	1067	250	1360
Totals	45	1115	255	

Heavys	40
Trucks	18
Cars	894
Totals	952

East Leg Total:	1049
East Entering:	390
East Peds:	0
Peds Cross:	⧖

Trafalgar Rd

Heavys	Trucks	Cars	Totals
4	2	179	185

Lower Base Line

	Cars	Trucks	Heavys	Totals
	89	3	2	94
	109	1	1	111
	182	1	2	185
	380	5	5	

N
W E
S

Heavys	Trucks	Cars	Totals
2	2	89	93
0	1	265	266
0	1	52	53
2	4	406	

Lower Base Line

Cars	Trucks	Heavys	Totals
649	3	7	659

Trafalgar Rd

Peds Cross:	⧖
West Peds:	0
West Entering:	412
West Leg Total:	597

Cars	1301			
Trucks	17			
Heavys	35			
Totals	1353			

Cars	27	716	134	877
Trucks	0	13	1	14
Heavys	2	36	3	41
Totals	29	765	138	

Peds Cross:	⋈
South Peds:	1
South Entering:	932
South Leg Total:	2285

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

Municipality: Milton
Site #: 2508500005
Intersection: Trafalgar Rd & Lower Base Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S

North Leg Total: 2377
North Entering: 991
North Peds: 0
Peds Cross: ⋈

Heavys	1	22	2	25
Trucks	0	13	0	13
Cars	38	774	141	953
Totals	39	809	143	

Heavys	24
Trucks	14
Cars	1348
Totals	1386

East Leg Total: 1175
East Entering: 647
East Peds: 0
Peds Cross: ⧖

Trafalgar Rd

Heavys	Trucks	Cars	Totals
1	1	480	482

Lower Base Line

Cars	Trucks	Heavys	Totals
190	3	1	194
278	1	0	279
173	1	0	174
641	5	1	

N
W E
S

Heavys	Trucks	Cars	Totals
1	0	24	25
0	2	176	178
0	1	28	29
1	3	228	

Lower Base Line

Cars	Trucks	Heavys	Totals
522	4	2	528

Trafalgar Rd

Peds Cross: ⧖
West Peds: 0
West Entering: 232
West Leg Total: 714

Cars	975
Trucks	15
Heavys	22
Totals	1012

Cars	164	1134	205	1503
Trucks	0	11	2	13
Heavys	0	22	0	22
Totals	164	1167	207	

Peds Cross: ⋈
South Peds: 0
South Entering: 1538
South Leg Total: 2550

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

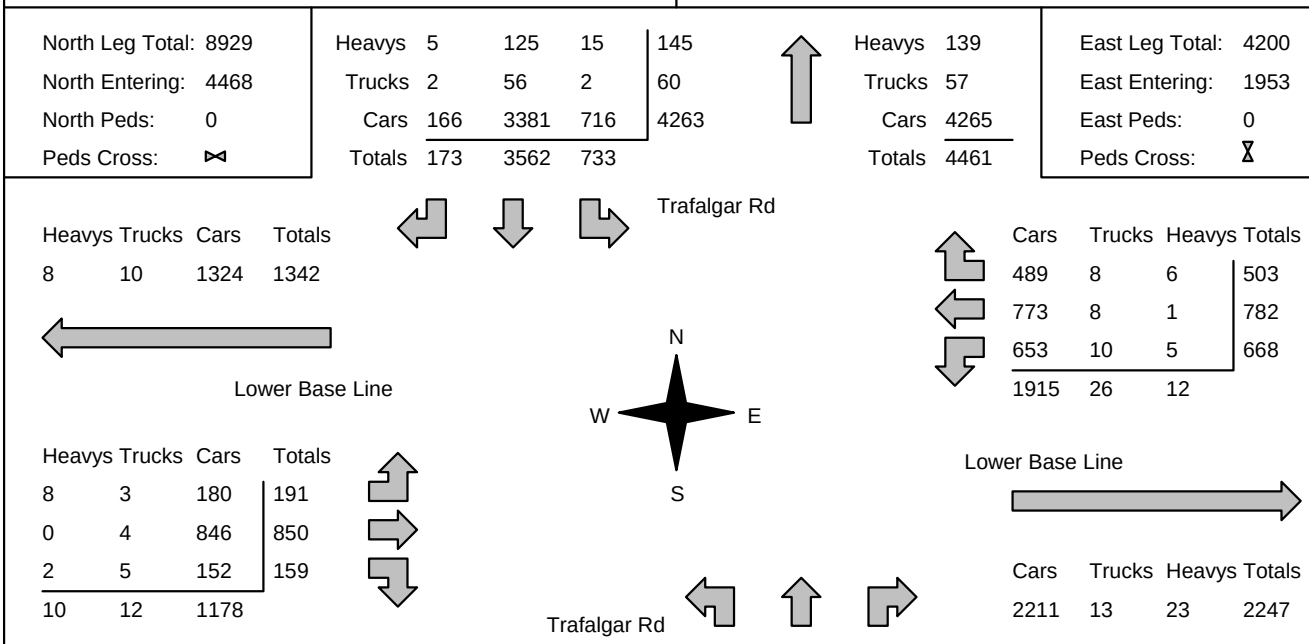
Municipality: Milton
Site #: 2508500005
Intersection: Trafalgar Rd & Lower Base Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Trafalgar Rd runs N/S



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Trafalgar Rd & Lower Base Line | **Count Date:** 28-May-25 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*212*	*935*	*44*	*1191*	*0*	*1991*
9:00:00	*255*	*1115*	*45*	*1415*	*0*	*2347*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*126*	*709*	*41*	*876*	*0*	*2383*
18:00:00	*140*	*803*	*43*	*986*	*0*	*2565*
Totals:	733	3562	173	4468	0	9286

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*26*	*642*	*132*	*800*	*0*
9:00:00	*29*	*765*	*138*	*932*	*1*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*178*	*1160*	*169*	*1507*	*0*
18:00:00	*154*	*1200*	*225*	*1579*	*0*
S Totals:	387	3767	664	4818	1

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*118*	*112*	*71*	*301*	*0*	*600*
9:00:00	*185*	*111*	*94*	*390*	*0*	*802*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*202*	*299*	*167*	*668*	*0*	*938*
18:00:00	*163*	*260*	*171*	*594*	*0*	*813*
Totals:	668	782	503	1953	0	3153

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*42*	*204*	*53*	*299*	*0*
9:00:00	*93*	*266*	*53*	*412*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*25*	*215*	*30*	*270*	*0*
18:00:00	*31*	*165*	*23*	*219*	*0*
W Totals:	191	850	159	1200	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*364*	*545*	*0*	*526*	*454*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500005

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	40	40	196	196	10	10	0	0	4	4	1	1	2	2	11	11	0	0	0	0
7:30:00	82	42	392	196	19	9	0	0	10	6	1	0	3	1	27	16	1	1	0	0
7:45:00	152	70	628	236	30	11	0	0	11	1	1	0	4	1	30	3	1	0	0	0
8:00:00	206	54	880	252	42	12	0	0	15	4	1	0	6	2	40	10	1	0	0	0
8:15:00	268	62	1125	245	57	15	0	0	20	5	1	0	7	1	50	10	1	0	0	0
8:30:00	332	64	1397	272	67	10	1	1	21	1	1	0	9	2	59	9	2	1	0	0
8:45:00	393	61	1681	284	79	12	1	0	26	5	2	1	9	0	63	4	2	0	0	0
9:00:00	456	63	1947	266	85	6	1	0	30	4	2	0	10	1	73	10	2	0	0	0
9:15:00	456	0	1947	0	85	0	1	0	30	0	2	0	10	0	73	0	2	0	0	0
16:00:00	456	0	1947	0	85	0	1	0	30	0	2	0	10	0	73	0	2	0	0	0
16:15:00	483	27	2115	168	95	10	2	1	33	3	2	0	11	1	82	9	3	1	0	0
16:30:00	511	28	2267	152	104	9	2	0	37	4	2	0	13	2	94	12	4	1	0	0
16:45:00	547	36	2443	176	118	14	2	0	40	3	2	0	13	0	97	3	4	0	0	0
17:00:00	578	31	2614	171	124	6	2	0	45	5	2	0	13	0	100	3	4	0	0	0
17:15:00	620	42	2787	173	135	11	2	0	48	3	2	0	13	0	108	8	4	0	0	0
17:30:00	659	39	2982	195	140	5	2	0	50	2	2	0	15	2	113	5	4	0	0	0
17:45:00	688	29	3217	235	156	16	2	0	53	3	2	0	15	0	119	6	5	1	0	0
18:00:00	716	28	3381	164	166	10	2	0	56	3	2	0	15	0	125	6	5	0	0	0
18:15:00	716	0	3381	0	166	0	2	0	56	0	2	0	15	0	125	0	5	0	0	0
18:15:15	716	0	3381	0	166	0	2	0	56	0	2	0	15	0	125	0	5	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500005

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	17	17	26	26	10	10	2	2	2	2	1	1	0	0	0	0	2	2	0	0
7:30:00	42	25	52	26	28	18	4	2	3	1	1	0	2	2	0	0	2	0	0	0
7:45:00	77	35	85	33	49	21	5	1	5	2	2	1	3	1	0	0	2	0	0	0
8:00:00	109	32	106	21	67	18	6	1	6	1	2	0	3	0	0	0	2	0	0	0
8:15:00	149	40	142	36	89	22	6	0	6	0	2	0	3	0	0	0	2	0	0	0
8:30:00	191	42	169	27	110	21	6	0	6	0	3	1	5	2	1	1	3	1	0	0
8:45:00	250	59	199	30	138	28	6	0	7	1	4	1	5	0	1	0	4	1	0	0
9:00:00	291	41	215	16	156	18	7	1	7	0	5	1	5	0	1	0	4	0	0	0
9:15:00	291	0	215	0	156	0	7	0	7	0	5	0	5	0	1	0	4	0	0	0
16:00:00	291	0	215	0	156	0	7	0	7	0	5	0	5	0	1	0	4	0	0	0
16:15:00	347	56	283	68	187	31	7	0	7	0	5	0	5	0	1	0	4	0	0	0
16:30:00	391	44	357	74	226	39	8	1	7	0	5	0	5	0	1	0	4	0	0	0
16:45:00	439	48	426	69	268	42	9	1	7	0	5	0	5	0	1	0	5	1	0	0
17:00:00	490	51	513	87	321	53	10	1	8	1	6	1	5	0	1	0	5	0	0	0
17:15:00	539	49	590	77	378	57	10	0	8	0	8	2	5	0	1	0	6	1	0	0
17:30:00	583	44	650	60	420	42	10	0	8	0	8	0	5	0	1	0	6	0	0	0
17:45:00	612	29	704	54	458	38	10	0	8	0	8	0	5	0	1	0	6	0	0	0
18:00:00	653	41	773	69	489	31	10	0	8	0	8	0	5	0	1	0	6	0	0	0
18:15:00	653	0	773	0	489	0	10	0	8	0	8	0	5	0	1	0	6	0	0	0
18:15:15	653	0	773	0	489	0	10	0	8	0	8	0	5	0	1	0	6	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500005

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	111	111	24	24	0	0	4	4	0	0	0	0	7	7	0	0	0	0
7:30:00	5	4	277	166	38	14	0	0	5	1	1	1	0	0	15	8	0	0	0	0
7:45:00	18	13	439	162	79	41	0	0	11	6	2	1	0	0	25	10	0	0	0	0
8:00:00	26	8	594	155	130	51	0	0	14	3	2	0	0	0	34	9	0	0	0	0
8:15:00	30	4	790	196	163	33	0	0	16	2	2	0	1	1	42	8	0	0	0	0
8:30:00	37	7	962	172	193	30	0	0	20	4	2	0	1	0	55	13	2	2	0	0
8:45:00	48	11	1124	162	234	41	0	0	23	3	2	0	2	1	64	9	3	1	0	0
9:00:00	53	5	1310	186	264	30	0	0	27	4	3	1	2	0	70	6	3	0	1	1
9:15:00	53	0	1310	0	264	0	0	0	27	0	3	0	2	0	70	0	3	0	1	0
16:00:00	53	0	1310	0	264	0	0	0	27	0	3	0	2	0	70	0	3	0	1	0
16:15:00	95	42	1565	255	305	41	0	0	29	2	4	1	2	0	79	9	5	2	1	0
16:30:00	130	35	1852	287	350	45	0	0	31	2	5	1	2	0	89	10	8	3	1	0
16:45:00	179	49	2151	299	384	34	0	0	33	2	5	0	2	0	100	11	8	0	1	0
17:00:00	231	52	2429	278	426	42	0	0	36	3	5	0	2	0	102	2	8	0	1	0
17:15:00	270	39	2697	268	472	46	0	0	37	1	5	0	2	0	109	7	8	0	1	0
17:30:00	304	34	2957	260	534	62	0	0	41	4	6	1	2	0	117	8	8	0	1	0
17:45:00	343	39	3285	328	589	55	0	0	44	3	7	1	2	0	122	5	8	0	1	0
18:00:00	385	42	3596	311	649	60	0	0	46	2	7	0	2	0	125	3	8	0	1	0
18:15:00	385	0	3596	0	649	0	0	0	46	0	7	0	2	0	125	0	8	0	1	0
18:15:15	385	0	3596	0	649	0	0	0	46	0	7	0	2	0	125	0	8	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500005

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	28	28	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	14	13	79	51	9	5	0	0	0	0	0	0	2	2	0	0	0	0	0	0
7:45:00	28	14	138	59	30	21	1	1	0	0	1	1	2	0	0	0	1	1	0	0
8:00:00	39	11	204	66	48	18	1	0	0	0	3	2	2	0	0	0	2	1	0	0
8:15:00	59	20	260	56	73	25	1	0	1	1	3	0	2	0	0	0	2	0	0	0
8:30:00	84	25	346	86	85	12	1	0	1	0	3	0	3	1	0	0	2	0	0	0
8:45:00	108	24	417	71	92	7	1	0	1	0	3	0	4	1	0	0	2	0	0	0
9:00:00	128	20	469	52	100	8	3	2	1	0	4	1	4	0	0	0	2	0	0	0
9:15:00	128	0	469	0	100	0	3	0	1	0	4	0	4	0	0	0	2	0	0	0
16:00:00	128	0	469	0	100	0	3	0	1	0	4	0	4	0	0	0	2	0	0	0
16:15:00	130	2	508	39	110	10	3	0	1	0	4	0	4	0	0	0	2	0	0	0
16:30:00	134	4	566	58	113	3	3	0	2	1	4	0	5	1	0	0	2	0	0	0
16:45:00	142	8	626	60	120	7	3	0	2	0	4	0	7	2	0	0	2	0	0	0
17:00:00	149	7	683	57	130	10	3	0	2	0	4	0	8	1	0	0	2	0	0	0
17:15:00	157	8	724	41	136	6	3	0	3	1	4	0	8	0	0	0	2	0	0	0
17:30:00	162	5	761	37	140	4	3	0	3	0	4	0	8	0	0	0	2	0	0	0
17:45:00	166	4	802	41	148	8	3	0	4	1	5	1	8	0	0	0	2	0	0	0
18:00:00	180	14	846	44	152	4	3	0	4	0	5	0	8	0	0	0	2	0	0	0
18:15:00	180	0	846	0	152	0	3	0	4	0	5	0	8	0	0	0	2	0	0	0
18:15:15	180	0	846	0	152	0	3	0	4	0	5	0	8	0	0	0	2	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 7:45:00
To: 8:45:00

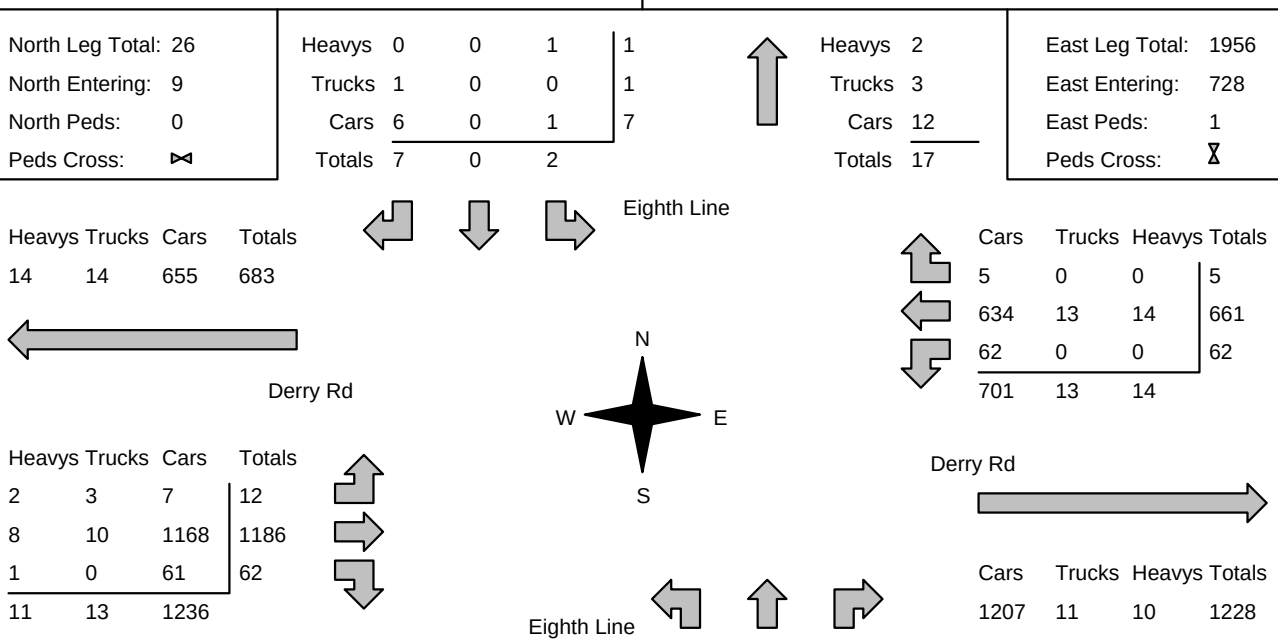
Municipality: Milton
Site #: 2508500006
Intersection: Derry Rd & Eighth Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:45:00
To: 17:45:00

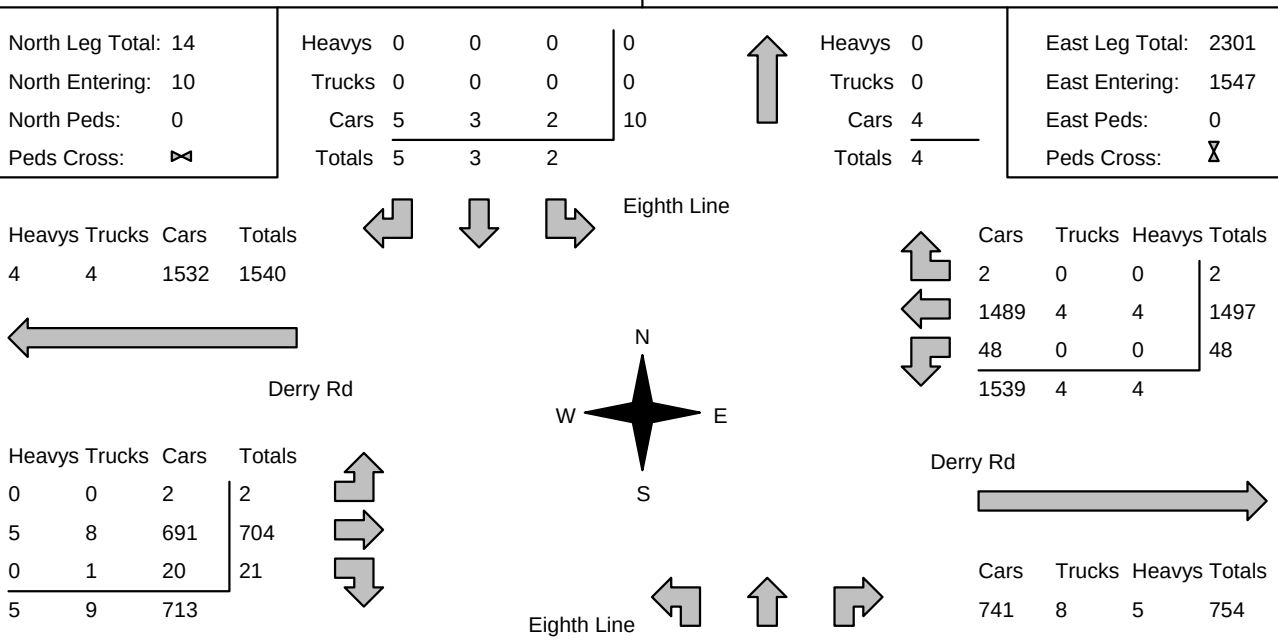
Municipality: Milton
Site #: 2508500006
Intersection: Derry Rd & Eighth Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

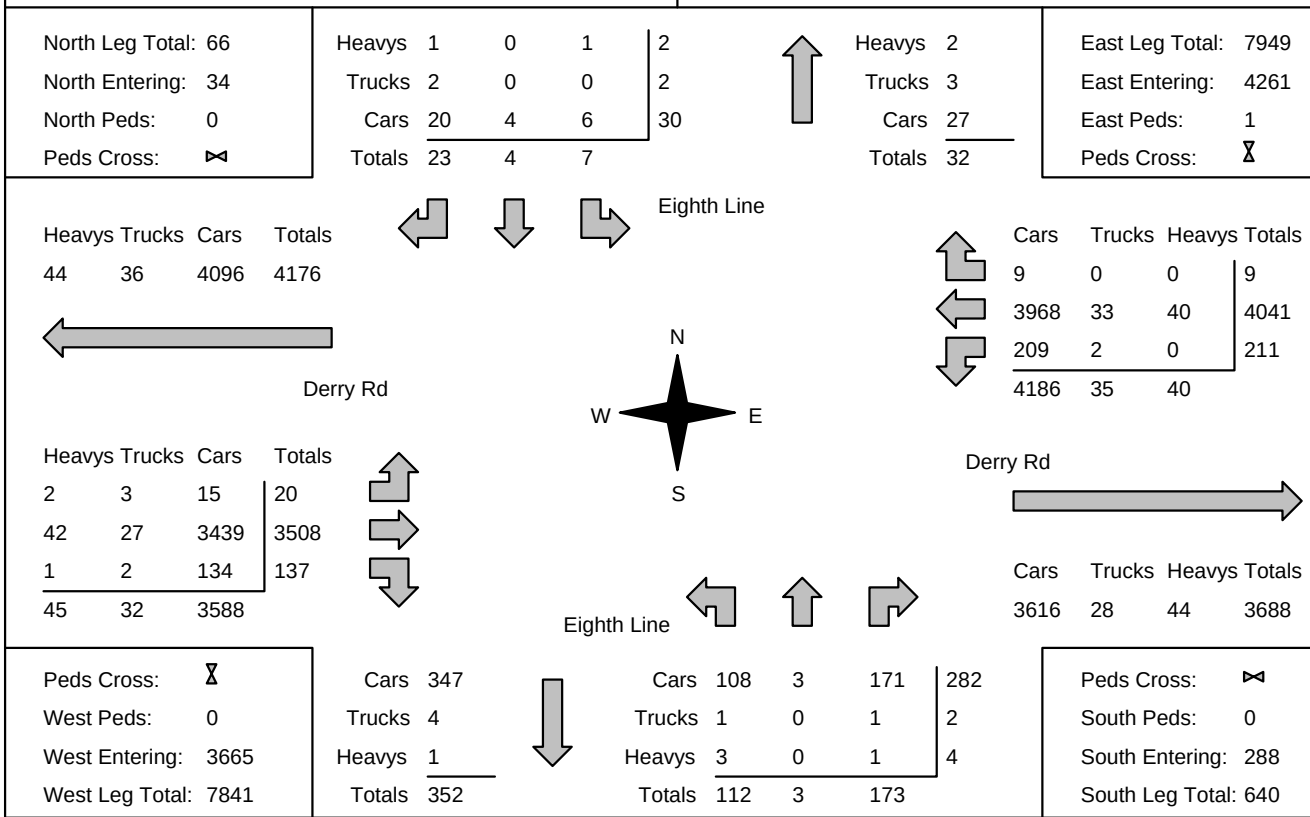
Municipality: Milton
Site #: 2508500006
Intersection: Derry Rd & Eighth Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Derry Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Derry Rd & Eighth Line | **Count Date:** 28-May-25 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	North/South Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*2*	*0*	*11*	*13*	*0*	*53*
9:00:00	*3*	*0*	*5*	*8*	*0*	*71*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*0*	*2*	*2*	*4*	*0*	*103*
18:00:00	*2*	*2*	*5*	*9*	*0*	*95*
Totals:	7	4	23	34	0	322

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*13*	*0*	*27*	*40*	*0*
9:00:00	*19*	*1*	*43*	*63*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*41*	*2*	*56*	*99*	*0*
18:00:00	*39*	*0*	*47*	*86*	*0*
S Totals:	112	3	173	288	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds	East/West Total Approaches
	Left	Thru	Right	Grand Total		
7:00:00	*0*	*0*	*0*	*0*	*0*	*0*
8:00:00	*57*	*550*	*2*	*609*	*0*	*1677*
9:00:00	*59*	*639*	*5*	*703*	*1*	*1878*
16:00:00	*0*	*0*	*0*	*0*	*0*	*0*
17:00:00	*52*	*1397*	*0*	*1449*	*0*	*2140*
18:00:00	*43*	*1455*	*2*	*1500*	*0*	*2231*
Totals:	211	4041	9	4261	1	7926

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*6*	*1009*	*53*	*1068*	*0*
9:00:00	*9*	*1125*	*41*	*1175*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*3*	*667*	*21*	*691*	*0*
18:00:00	*2*	*707*	*22*	*731*	*0*
W Totals:	20	3508	137	3665	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*15*	*24*	*0*	*43*	*43*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500006

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	0	0	4	4	0	0	0	0	0	0	0	0	0	0	1	1	0	0
7:30:00	2	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0
7:45:00	2	0	0	0	7	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0
8:00:00	2	0	0	0	8	1	0	0	0	0	2	1	0	0	0	0	1	0	0	0
8:15:00	2	0	0	0	10	2	0	0	0	0	2	0	1	1	0	0	1	0	0	0
8:30:00	2	0	0	0	11	1	0	0	0	0	2	0	1	0	0	0	1	0	0	0
8:45:00	3	1	0	0	13	2	0	0	0	0	2	0	1	0	0	0	1	0	0	0
9:00:00	4	1	0	0	13	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
9:15:00	4	0	0	0	13	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
16:00:00	4	0	0	0	13	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
16:15:00	4	0	1	1	15	2	0	0	0	0	2	0	1	0	0	0	1	0	0	0
16:30:00	4	0	1	0	15	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
16:45:00	4	0	1	0	15	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
17:00:00	4	0	2	1	15	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
17:15:00	5	1	4	2	17	2	0	0	0	0	2	0	1	0	0	0	1	0	0	0
17:30:00	5	0	4	0	17	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
17:45:00	6	1	4	0	20	3	0	0	0	0	2	0	1	0	0	0	1	0	0	0
18:00:00	6	0	4	0	20	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
18:15:00	6	0	4	0	20	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0
18:15:15	6	0	4	0	20	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500006

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	11	11	110	110	0	0	1	1	1	1	0	0	0	0	4	4	0	0	0	0
7:30:00	25	14	237	127	0	0	1	0	2	1	0	0	0	0	7	3	0	0	0	0
7:45:00	40	15	383	146	1	1	2	1	3	1	0	0	0	0	9	2	0	0	0	0
8:00:00	55	15	529	146	2	1	2	0	8	5	0	0	0	0	13	4	0	0	0	0
8:15:00	68	13	690	161	4	2	2	0	9	1	0	0	0	0	17	4	0	0	0	0
8:30:00	81	13	851	161	6	2	2	0	12	3	0	0	0	0	20	3	0	0	1	1
8:45:00	102	21	1017	166	6	0	2	0	16	4	0	0	0	0	23	3	0	0	1	0
9:00:00	114	12	1144	127	7	1	2	0	20	4	0	0	0	0	25	2	0	0	1	0
9:15:00	114	0	1144	0	7	0	2	0	20	0	0	0	0	0	25	0	0	0	1	0
16:00:00	114	0	1144	0	7	0	2	0	20	0	0	0	0	0	25	0	0	0	1	0
16:15:00	125	11	1433	289	7	0	2	0	24	4	0	0	0	0	29	4	0	0	1	0
16:30:00	139	14	1787	354	7	0	2	0	26	2	0	0	0	0	30	1	0	0	1	0
16:45:00	148	9	2157	370	7	0	2	0	29	3	0	0	0	0	33	3	0	0	1	0
17:00:00	166	18	2521	364	7	0	2	0	31	2	0	0	0	0	34	1	0	0	1	0
17:15:00	180	14	2876	355	7	0	2	0	31	0	0	0	0	0	36	2	0	0	1	0
17:30:00	187	7	3263	387	7	0	2	0	32	1	0	0	0	0	37	1	0	0	1	0
17:45:00	196	9	3646	383	9	2	2	0	33	1	0	0	0	0	37	0	0	0	1	0
18:00:00	209	13	3968	322	9	0	2	0	33	0	0	0	0	0	40	3	0	0	1	0
18:15:00	209	0	3968	0	9	0	2	0	33	0	0	0	0	0	40	0	0	0	1	0
18:15:15	209	0	3968	0	9	0	2	0	33	0	0	0	0	0	40	0	0	0	1	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500006

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	4	4	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	6	2	0	0	14	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45:00	11	5	0	0	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00:00	13	2	0	0	27	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15:00	15	2	0	0	34	7	0	0	0	0	0	0	0	0	0	0	1	1	0	0
8:30:00	17	2	0	0	43	9	0	0	0	0	0	0	0	0	0	0	1	0	0	0
8:45:00	26	9	0	0	56	13	0	0	0	0	1	1	0	0	0	0	1	0	0	0
9:00:00	30	4	1	1	68	12	1	1	0	0	1	0	1	1	0	0	1	0	0	0
9:15:00	30	0	1	0	68	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0
16:00:00	30	0	1	0	68	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0
16:15:00	39	9	3	2	79	11	1	0	0	0	1	0	1	0	0	0	1	0	0	0
16:30:00	45	6	3	0	94	15	1	0	0	0	1	0	3	2	0	0	1	0	0	0
16:45:00	61	16	3	0	105	11	1	0	0	0	1	0	3	0	0	0	1	0	0	0
17:00:00	69	8	3	0	124	19	1	0	0	0	1	0	3	0	0	0	1	0	0	0
17:15:00	80	11	3	0	133	9	1	0	0	0	1	0	3	0	0	0	1	0	0	0
17:30:00	89	9	3	0	141	8	1	0	0	0	1	0	3	0	0	0	1	0	0	0
17:45:00	99	10	3	0	153	12	1	0	0	0	1	0	3	0	0	0	1	0	0	0
18:00:00	108	9	3	0	171	18	1	0	0	0	1	0	3	0	0	0	1	0	0	0
18:15:00	108	0	3	0	171	0	1	0	0	0	1	0	3	0	0	0	1	0	0	0
18:15:15	108	0	3	0	171	0	1	0	0	0	1	0	3	0	0	0	1	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500006

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	1	1	201	201	3	3	0	0	1	1	1	1	0	0	4	4	0	0	0	0
7:30:00	2	1	413	212	11	8	0	0	2	1	1	0	0	0	7	3	0	0	0	0
7:45:00	3	1	685	272	29	18	0	0	4	2	1	0	0	0	9	2	0	0	0	0
8:00:00	5	2	990	305	52	23	0	0	7	3	1	0	1	1	12	3	0	0	0	0
8:15:00	7	2	1253	263	68	16	0	0	9	2	1	0	2	1	14	2	1	1	0	0
8:30:00	8	1	1577	324	80	12	2	2	10	1	1	0	2	0	16	2	1	0	0	0
8:45:00	10	2	1853	276	90	10	3	1	14	4	1	0	2	0	17	1	1	0	0	0
9:00:00	10	0	2101	248	92	2	3	0	14	0	1	0	2	0	19	2	1	0	0	0
9:15:00	10	0	2101	0	92	0	3	0	14	0	1	0	2	0	19	0	1	0	0	0
16:00:00	10	0	2101	0	92	0	3	0	14	0	1	0	2	0	19	0	1	0	0	0
16:15:00	11	1	2277	176	98	6	3	0	18	4	1	0	2	0	21	2	1	0	0	0
16:30:00	12	1	2417	140	103	5	3	0	19	1	1	0	2	0	29	8	1	0	0	0
16:45:00	13	1	2584	167	108	5	3	0	19	0	1	0	2	0	34	5	1	0	0	0
17:00:00	13	0	2745	161	113	5	3	0	20	1	1	0	2	0	36	2	1	0	0	0
17:15:00	14	1	2929	184	115	2	3	0	24	4	2	1	2	0	37	1	1	0	0	0
17:30:00	14	0	3106	177	122	7	3	0	27	3	2	0	2	0	38	1	1	0	0	0
17:45:00	15	1	3275	169	128	6	3	0	27	0	2	0	2	0	39	1	1	0	0	0
18:00:00	15	0	3439	164	134	6	3	0	27	0	2	0	2	0	42	3	1	0	0	0
18:15:00	15	0	3439	0	134	0	3	0	27	0	2	0	2	0	42	0	1	0	0	0
18:15:15	15	0	3439	0	134	0	3	0	27	0	2	0	2	0	42	0	1	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Morning Peak Diagram

Specified Period
From: 7:00:00
To: 9:00:00

One Hour Peak
From: 8:00:00
To: 9:00:00

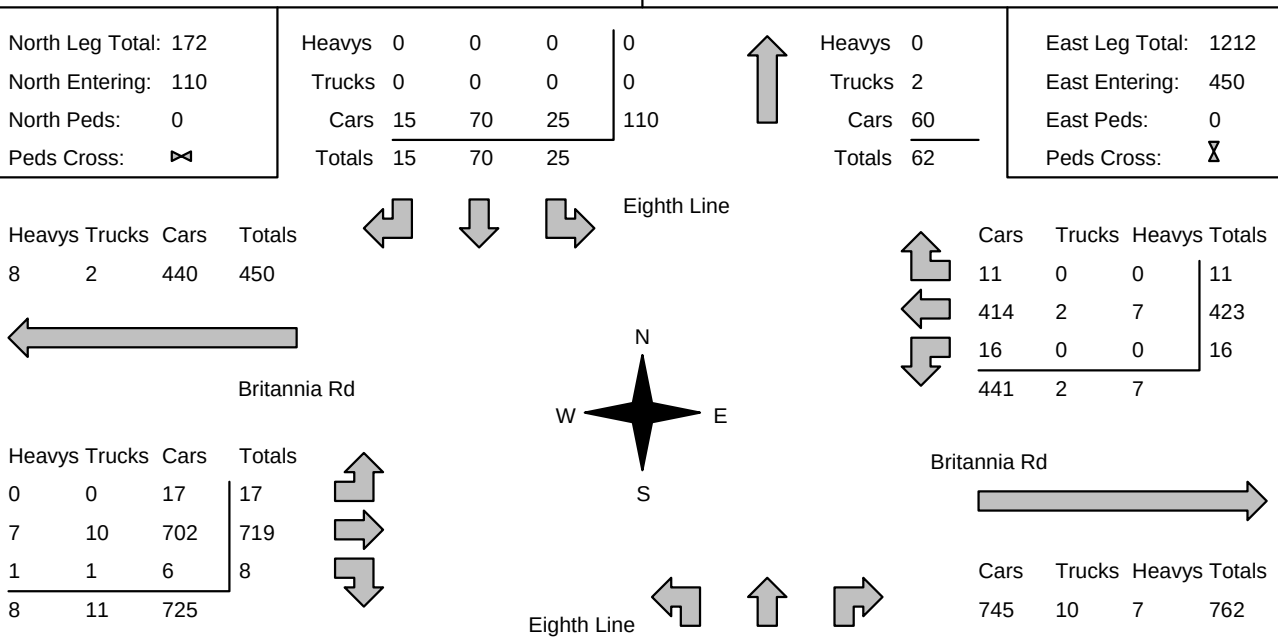
Municipality: Milton
Site #: 2508500007
Intersection: Britannia Rd & Eighth Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Britannia Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Afternoon Peak Diagram

Specified Period
From: 16:00:00
To: 18:00:00

One Hour Peak
From: 16:30:00
To: 17:30:00

Municipality: Milton
Site #: 2508500007
Intersection: Britannia Rd & Eighth Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

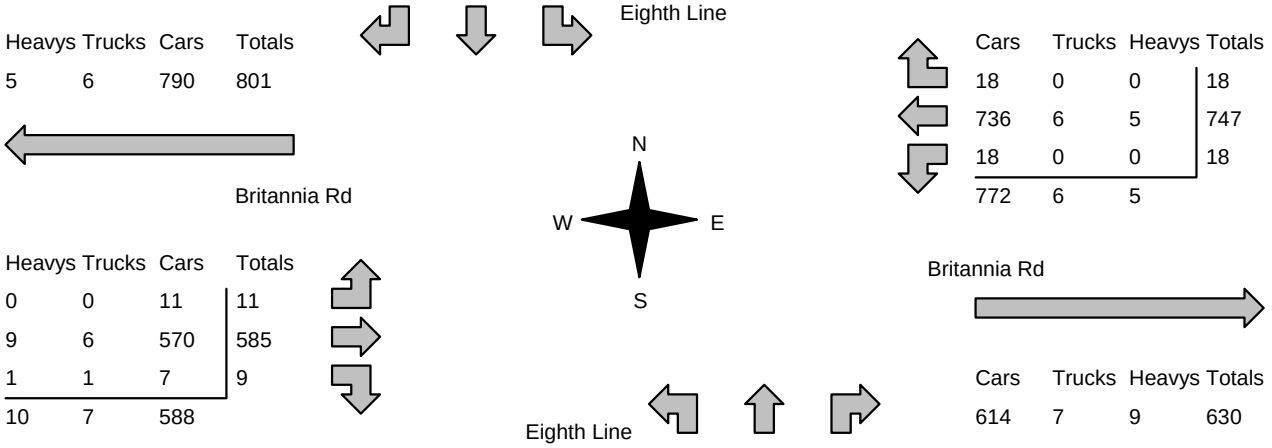
Major Road: Britannia Rd runs W/E

North Leg Total: 154
North Entering: 72
North Peds: 0
Peds Cross: ⋈

Heavys	0	0	0	0
Trucks	0	1	0	1
Cars	28	28	15	71
Totals	28	29	15	

Heavys	0
Trucks	0
Cars	82
Totals	82

East Leg Total: 1413
East Entering: 783
East Peds: 0
Peds Cross: ⧖



Heavys	Trucks	Cars	Totals
5	6	790	801

Cars	Trucks	Heavys	Totals
18	0	0	18
736	6	5	747
18	0	0	18
772	6	5	

Heavys	Trucks	Cars	Totals
0	0	11	11
9	6	570	585
1	1	7	9
10	7	588	

Cars	Trucks	Heavys	Totals
614	7	9	630

Peds Cross: ⧖
West Peds: 0
West Entering: 605
West Leg Total: 1406

Cars	53			
Trucks	2			
Heavys	1			
Totals	56			

Cars	26	53	29	108
Trucks	0	0	1	1
Heavys	0	0	0	0
Totals	26	53	30	

Peds Cross: ⋈
South Peds: 0
South Entering: 109
South Leg Total: 165

Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Total Count Diagram

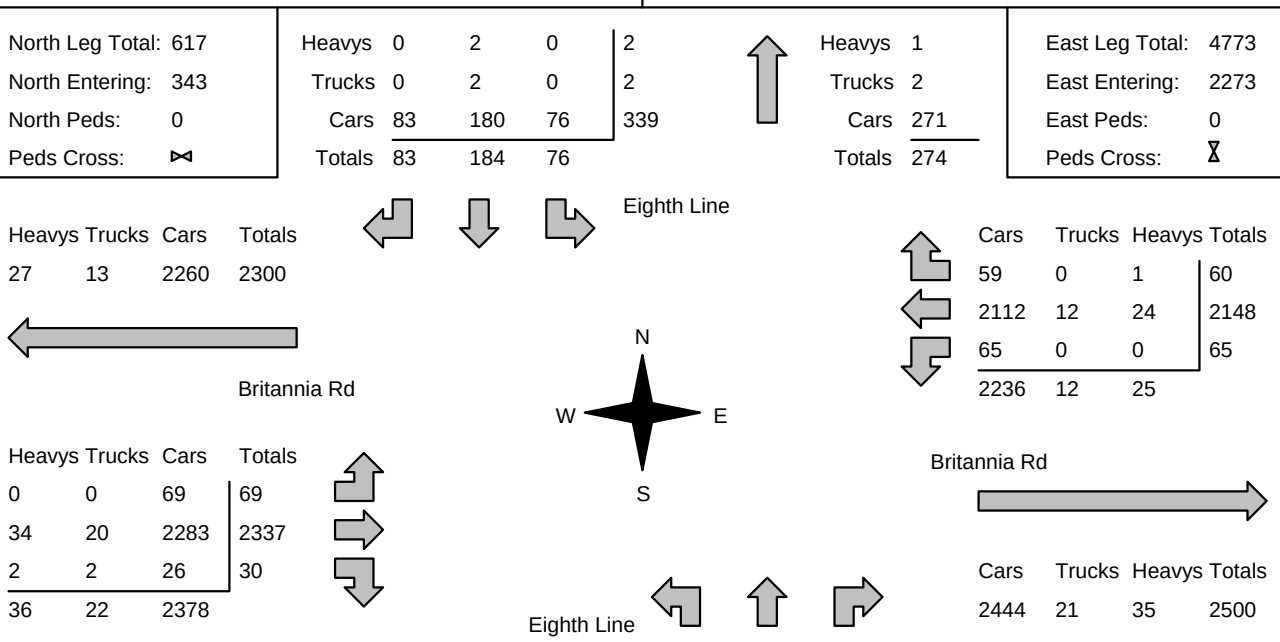
Municipality: Milton
Site #: 2508500007
Intersection: Britannia Rd & Eighth Line
TFR File #: 1
Count date: 28-May-25

Weather conditions:

Person counted:
Person prepared:
Person checked:

**** Signalized Intersection ****

Major Road: Britannia Rd runs W/E



Comments

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Traffic Count Summary

Intersection: Britannia Rd & Eighth Line | **Count Date:** 28-May-25 | **Municipality:** Milton

North Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*17*	*60*	*18*	*95*	*0*
9:00:00	*25*	*70*	*15*	*110*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*16*	*32*	*26*	*74*	*0*
18:00:00	*18*	*22*	*24*	*64*	*0*
Totals:	76	184	83	343	0

North/South Total Approaches: 644

South Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*5*	*16*	*16*	*37*	*0*
9:00:00	*12*	*34*	*18*	*64*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*16*	*49*	*21*	*86*	*0*
18:00:00	*36*	*46*	*32*	*114*	*0*
S Totals:	69	145	87	301	0

East Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*12*	*334*	*11*	*357*	*0*
9:00:00	*16*	*423*	*11*	*450*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*19*	*687*	*19*	*725*	*0*
18:00:00	*18*	*704*	*19*	*741*	*0*
Totals:	65	2148	60	2273	0

East/West Total Approaches: 4709

West Approach Totals

Hour Ending	Includes Cars, Trucks, & Heavys				Total Peds
	Left	Thru	Right	Grand Total	
7:00:00	*0*	*0*	*0*	*0*	*0*
8:00:00	*10*	*489*	*9*	*508*	*0*
9:00:00	*17*	*719*	*8*	*744*	*0*
16:00:00	*0*	*0*	*0*	*0*	*0*
17:00:00	*22*	*516*	*7*	*545*	*0*
18:00:00	*20*	*613*	*6*	*639*	*0*
W Totals:	69	2337	30	2436	0

Calculated Values for Traffic Crossing Major Street

Hours Ending:	*7:00*	*8:00*	*9:00*	*16:00*	*17:00*	*18:00*	*0:00*	*0:00*
Crossing Values:	*0*	*82*	*107*	*0*	*81*	*100*	*0*	*0*

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500007

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Heavys - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	0	0	7	7	5	5	0	0	1	1	0	0	0	0	1	1	0	0	0	0
7:30:00	3	3	21	14	11	6	0	0	1	0	0	0	0	0	2	1	0	0	0	0
7:45:00	10	7	36	15	14	3	0	0	1	0	0	0	0	0	2	0	0	0	0	0
8:00:00	17	7	57	21	18	4	0	0	1	0	0	0	0	0	2	0	0	0	0	0
8:15:00	29	12	73	16	26	8	0	0	1	0	0	0	0	0	2	0	0	0	0	0
8:30:00	36	7	92	19	28	2	0	0	1	0	0	0	0	0	2	0	0	0	0	0
8:45:00	42	6	113	21	30	2	0	0	1	0	0	0	0	0	2	0	0	0	0	0
9:00:00	42	0	127	14	33	3	0	0	1	0	0	0	0	0	2	0	0	0	0	0
9:15:00	42	0	127	0	33	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0
16:00:00	42	0	127	0	33	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0
16:15:00	45	3	134	7	37	4	0	0	1	0	0	0	0	0	2	0	0	0	0	0
16:30:00	49	4	139	5	46	9	0	0	1	0	0	0	0	0	2	0	0	0	0	0
16:45:00	53	4	146	7	51	5	0	0	1	0	0	0	0	0	2	0	0	0	0	0
17:00:00	58	5	159	13	59	8	0	0	1	0	0	0	0	0	2	0	0	0	0	0
17:15:00	59	1	164	5	68	9	0	0	1	0	0	0	0	0	2	0	0	0	0	0
17:30:00	64	5	167	3	74	6	0	0	2	1	0	0	0	0	2	0	0	0	0	0
17:45:00	72	8	172	5	76	2	0	0	2	0	0	0	0	0	2	0	0	0	0	0
18:00:00	76	4	180	8	83	7	0	0	2	0	0	0	0	0	2	0	0	0	0	0
18:15:00	76	0	180	0	83	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0
18:15:15	76	0	180	0	83	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500007

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Heavys - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	3	3	64	64	4	4	0	0	1	1	0	0	0	0	5	5	0	0	0	0
7:30:00	5	2	136	72	6	2	0	0	1	0	0	0	0	0	5	0	0	0	0	0
7:45:00	8	3	225	89	10	4	0	0	2	1	0	0	0	0	5	0	0	0	0	0
8:00:00	12	4	324	99	11	1	0	0	4	2	0	0	0	0	6	1	0	0	0	0
8:15:00	18	6	416	92	12	1	0	0	4	0	0	0	0	0	8	2	0	0	0	0
8:30:00	19	1	513	97	16	4	0	0	5	1	0	0	0	0	11	3	0	0	0	0
8:45:00	25	6	613	100	21	5	0	0	6	1	0	0	0	0	12	1	0	0	0	0
9:00:00	28	3	738	125	22	1	0	0	6	0	0	0	0	0	13	1	0	0	0	0
9:15:00	28	0	738	0	22	0	0	0	6	0	0	0	0	0	13	0	0	0	0	0
16:00:00	28	0	738	0	22	0	0	0	6	0	0	0	0	0	13	0	0	0	0	0
16:15:00	28	0	897	159	29	7	0	0	6	0	0	0	0	0	16	3	0	0	0	0
16:30:00	34	6	1040	143	32	3	0	0	6	0	0	0	0	0	19	3	1	1	0	0
16:45:00	42	8	1231	191	35	3	0	0	7	1	0	0	0	0	21	2	1	0	0	0
17:00:00	47	5	1410	179	40	5	0	0	11	4	0	0	0	0	23	2	1	0	0	0
17:15:00	50	3	1593	183	45	5	0	0	12	1	0	0	0	0	23	0	1	0	0	0
17:30:00	52	2	1776	183	50	5	0	0	12	0	0	0	0	0	24	1	1	0	0	0
17:45:00	59	7	1945	169	57	7	0	0	12	0	0	0	0	0	24	0	1	0	0	0
18:00:00	65	6	2112	167	59	2	0	0	12	0	0	0	0	0	24	0	1	0	0	0
18:15:00	65	0	2112	0	59	0	0	0	12	0	0	0	0	0	24	0	1	0	0	0
18:15:15	65	0	2112	0	59	0	0	0	12	0	0	0	0	0	24	0	1	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500007

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Heavys - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	6	6	4	4	0	0	0	0	0	0	1	1	0	0	0	0	0	0
7:30:00	2	0	9	3	6	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0
7:45:00	2	0	10	1	9	3	1	1	0	0	0	0	1	0	0	0	0	0	0	0
8:00:00	3	1	16	6	16	7	1	0	0	0	0	0	1	0	0	0	0	0	0	0
8:15:00	6	3	19	3	19	3	1	0	0	0	0	0	1	0	0	0	0	0	0	0
8:30:00	8	2	23	4	24	5	1	0	0	0	0	0	1	0	0	0	0	0	0	0
8:45:00	10	2	36	13	32	8	1	0	1	1	0	0	2	1	0	0	0	0	0	0
9:00:00	14	4	48	12	34	2	1	0	2	1	0	0	2	0	0	0	0	0	0	0
9:15:00	14	0	48	0	34	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0
16:00:00	14	0	48	0	34	0	1	0	2	0	0	0	2	0	0	0	0	0	0	0
16:15:00	17	3	56	8	40	6	1	0	2	0	0	0	2	0	0	0	0	0	0	0
16:30:00	24	7	66	10	42	2	1	0	2	0	0	0	3	1	0	0	1	1	0	0
16:45:00	25	1	83	17	46	4	1	0	2	0	1	1	3	0	0	0	1	0	0	0
17:00:00	29	4	97	14	53	7	1	0	2	0	1	0	3	0	0	0	1	0	0	0
17:15:00	41	12	108	11	63	10	1	0	2	0	1	0	3	0	0	0	1	0	0	0
17:30:00	50	9	119	11	71	8	1	0	2	0	1	0	3	0	0	0	1	0	0	0
17:45:00	55	5	133	14	79	8	1	0	2	0	1	0	3	0	0	0	1	0	0	0
18:00:00	65	10	143	10	85	6	1	0	2	0	1	0	3	0	0	0	1	0	0	0
18:15:00	65	0	143	0	85	0	1	0	2	0	1	0	3	0	0	0	1	0	0	0
18:15:15	65	0	143	0	85	0	1	0	2	0	1	0	3	0	0	0	1	0	0	0

Accu-Traffic Inc.
Traffic Monitoring & Data Analysis

Accu-Traffic Inc.

Count Date: 28-May-25 Site #: 2508500007

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Heavys - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	3	3	74	74	2	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0
7:30:00	6	3	184	110	4	2	0	0	0	0	0	0	0	0	5	4	0	0	0	0
7:45:00	8	2	302	118	5	1	0	0	2	2	0	0	0	0	8	3	0	0	0	0
8:00:00	10	2	477	175	9	4	0	0	2	0	0	0	0	0	10	2	0	0	0	0
8:15:00	15	5	662	185	11	2	0	0	2	0	0	0	0	0	13	3	1	1	0	0
8:30:00	19	4	839	177	12	1	0	0	4	2	0	0	0	0	14	1	1	0	0	0
8:45:00	24	5	996	157	13	1	0	0	7	3	0	0	0	0	15	1	1	0	0	0
9:00:00	27	3	1179	183	15	2	0	0	12	5	1	1	0	0	17	2	1	0	0	0
9:15:00	27	0	1179	0	15	0	0	0	12	0	1	0	0	0	17	0	1	0	0	0
16:00:00	27	0	1179	0	15	0	0	0	12	0	1	0	0	0	17	0	1	0	0	0
16:15:00	32	5	1287	108	15	0	0	0	14	2	1	0	0	0	19	2	1	0	0	0
16:30:00	40	8	1410	123	17	2	0	0	14	0	1	0	0	0	21	2	1	0	0	0
16:45:00	43	3	1552	142	19	2	0	0	16	2	1	0	0	0	22	1	2	1	0	0
17:00:00	49	6	1681	129	21	2	0	0	16	0	1	0	0	0	27	5	2	0	0	0
17:15:00	49	0	1832	151	22	1	0	0	19	3	1	0	0	0	28	1	2	0	0	0
17:30:00	51	2	1980	148	24	2	0	0	20	1	2	1	0	0	30	2	2	0	0	0
17:45:00	59	8	2104	124	26	2	0	0	20	0	2	0	0	0	32	2	2	0	0	0
18:00:00	69	10	2283	179	26	0	0	0	20	0	2	0	0	0	34	2	2	0	0	0
18:15:00	69	0	2283	0	26	0	0	0	20	0	2	0	0	0	34	0	2	0	0	0
18:15:15	69	0	2283	0	26	0	0	0	20	0	2	0	0	0	34	0	2	0	0	0

Date: 3-Jun-17
Intersection: Trafalgar Road & Lowerbase Line

8 Phase Basic Timing Sheet												
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**2 Ped**	**4 Ped**	**6 Ped**	**8 Ped**
Phases in use	X	X	X	X	X	X		X				
Direction	SBLT	NB	WBLT	EB	NBLT	SB	EBLT	WB				
Min Green	7	25	7	10	7	25		10				
Veh Ext.	-	5.0	-	5.0		5.0		5.0				
Yellow	3	4.6	3	4.2	3	4.6		4.2				
Red	1	2	1	2	1	2		2				
Walk	-	-	-	-		-		-				
Don't Walk	-	-	-	-		-		-				
Max 1	20	50	12	38	11	59		50				
Max 2	15	57	12	36	15	57		48				
Max 3	12	53	12	43	11	54		55				
Veh Recall		x				x						
Ped Recall												

Notes:
Use Max 1 during AM Peak (6:00am-9:00am)
Use Max 2 during PM Peak (3:00pm-7:00pm)
Use Max 3 during OFF Peak (9:00am-3:00pm, 7:00pm-6:00am)

Date: 24-Oct-2025
Intersection: Britannia Rd @ Trafalgar Rd

8 Phase Basic Timing Sheet

	1	2	3	4	5	6	7	8	2 Ped	4 Ped	6 Ped	8 Ped
Phases in use	X	X	X	X	X	X	X	X				
Direction	SBLT	NB	WBLT	EB	NBLT	SB	EBLT	WB				
Min Green	7	20	7	20	7	20	7	20				
Veh Ext.	3.0	5.0	3.0	3.0	3.0	5.0	3.0	3.0				
Yellow	3	3.7	3	4.2	3	3.7	3	4.2				
Red	1	3.8	1	2.7	1	3.8	1	2.7				
Walk		7		7		7		7				
Don't Walk		34		26		34		26				
Max 1	12	59	16	53	12	59	16	53				
Max 2	12	65	16	47	30	47	16	47				
Max 3	12	64	12	52	15	61	12	52				
Max 4												
Veh Recall		x				x						
Ped Recall												

Notes:
Sync Reference 3:15
Max 1 6:00-9:00
Max 2 15:00-19:00
Max 3 9:00-15:00, 19:00-6:00

Pedestrian Re-service Active
Rest all Pedestrian Signals in Don't Walk
New Posted 70km/h Speed Zone

Date: 6-Jan-2025
Intersection: Britannia Rd @ Eighth Line

8 Phase Basic Timing Sheet

	1	2	3	4	5	6	7	8	2 Ped	4 Ped	6 Ped	8 Ped
Phases in use		X		X		X		X				
Direction		EB		SB		WB		NB				
Min Green		20		10		20		10				
Veh Ext.		3.0		3.0		3.0		3.0				
Yellow		4.2		4.2		4.2		4.2				
Red		2.6		3		2.6		3				
Walk		7		7		7		7				
Don't Walk		20		32		20		32				
Max 1		63		47		63		47				
Max 2												
Max 3												
Max 4												
Veh Recall		x				x						
Ped Recall												

Notes:
Pedestrian Re-service Active
Rest all Pedestrian Signals in Don't Walk
Set Sync Reference 3:15

New Posted 70km/h Speed Zone

Date: 18-Feb-26
Intersection: Derry Rd & Trafalgar Rd

8 Phase Basic Timing Sheet

	1	2	3	4	5	6	7	8	2 Ped	4 Ped	6 Ped	8 Ped
Phases in use	X	X	X	X	X	X	X	X	X	X	X	X
Direction	WBL	EB	NBL	SB	EBL	WB	SBL	NB				
Min Green	7	20	7	20	7	20	7	20				
Veh Ext.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0				
Yellow	3	4.6	3	3.7	3	4.6	3	3.7				
Red	1	2	1	2.7	1.5	2	1	2.7				
Walk		7		7		7		7				
Don't Walk		26		24		26		24				
Max 1	10	45	10	45	10	45	10	45				
Max 2												
Max 3												
Veh Recall		x				x						
Ped Recall												

Notes: Sync Reference 3:15

Date: 23-Aug-24
Intersection: Trafalgar Rd @ 401 South Terminal

8 Phase Basic Timing Sheet												
	1	2	3	4	5	6	7	8	2 Ped	4 Ped	6 Ped	8 Ped
Phases in use		X		X		X						
Direction		NB		EB		SB						
Min Green		20		10		20						
Veh Ext.		3.0		3.0		3.0						
Yellow		5		4.5		5						
Red		2		2.5		2						
Walk						7						
Don't Walk						23						
Max 1		42		24		42						
Max 2												
Max 3												
Veh Recall		x				x						
Ped Recall												
Notes:	Sync Reference time 3:15											

Date: 10-Jan-25
Intersection: Trafalgar Rd @ 401 North Terminal

8 Phase Basic Timing Sheet

	1	2	3	4	5	6	7	8	2 Ped	4 Ped	6 Ped	8 Ped
Phases in use		X		X	X	X		X				
Direction		NB		EB	NBLT	SB		WB				
Min Green		20		10	7	20		10				
Veh Ext.		4.0		2.0	2.0	4.0		2.0				
Yellow		5.4		4.5	3	5.4		4.5				
Red		2.7		2.8	1	2.7		2.6				
Walk		7		7		7		7				
Don't Walk		28		31		28		31				
Max 1		63		10	7	51		40				
Max 2												
Max 3												
Veh Recall		x				x						
Ped Recall												

Notes: Sync Reference time 3:15
Phases 4 & 8 are Split Phases

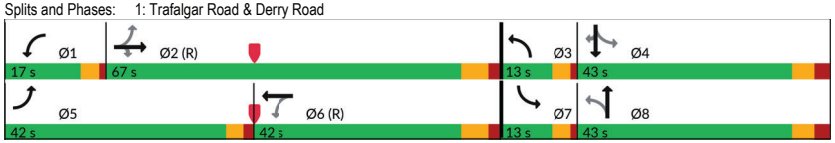
Appendix B Existing SYNCHRO Capacity and Queuing Analysis Reports

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	564	1057	212	196	381	87	91	576	127	71	686	55
Future Volume (vph)	564	1057	212	196	381	87	91	576	127	71	686	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	110.0		100.0	300.0		0.0	65.0		0.0	70.0		70.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	100.0			100.0			100.0			100.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.972			0.973				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3579	1585	1789	3357	0	1706	3322	0	1630	3411	1296
Flt Permitted	0.307			0.201			0.146			0.172		
Satd. Flow (perm)	578	3579	1585	379	3357	0	262	3322	0	295	3411	1296
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216		19			19				125
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		1512.3			1378.7			3096.6			2119.2	
Travel Time (s)		68.1			62.0			185.8			127.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	576	1079	216	200	389	89	93	588	130	72	700	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	576	1079	216	200	478	0	93	718	0	72	700	56
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0		2.0	10.0		6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6		2.0	0.6		6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		4
Detector Phase	5	2	2	1	6		3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0		7.0	20.0		7.0	20.0	20.0
Minimum Split (s)	11.5	39.6	39.6	11.0	39.6		11.0	37.4		11.0	37.4	37.4
Total Split (s)	42.0	67.0	67.0	17.0	42.0		13.0	43.0		13.0	43.0	43.0
Total Split (%)	30.0%	47.9%	47.9%	12.1%	30.0%		9.3%	30.7%		9.3%	30.7%	30.7%
Maximum Green (s)	37.5	60.4	60.4	13.0	35.4		9.0	36.6		9.0	36.6	36.6
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		3.0	3.7		3.0	3.7	3.7
All-Red Time (s)	1.5	2.0	2.0	1.0	2.0		1.0	2.7		1.0	2.7	2.7
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.6	4.6	3.0	4.6		3.0	4.4		3.0	4.4	4.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	7.0
Flash Don't Walk (s)		26.0	26.0		26.0			24.0			24.0	24.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	81.0	62.7	62.7	56.3	40.6		50.5	39.9		49.0	36.9	36.9
Actuated g/C Ratio	0.58	0.45	0.45	0.40	0.29		0.36	0.29		0.35	0.26	0.26
v/c Ratio	0.89	0.67	0.26	0.68	0.49		0.44	0.75		0.35	0.78	0.13
Control Delay (s/veh)	38.9	33.6	3.6	35.5	42.7		35.3	50.3		33.0	54.5	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	38.9	33.6	3.6	35.5	42.7		35.3	50.3		33.0	54.5	0.6
LOS	D	C	A	D	D		D	D		C	D	A
Approach Delay (s/veh)		31.8			40.6			48.6			49.0	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 39.9		Intersection LOS: D	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	576	1079	216	200	478	93	718	72	700	56
v/c Ratio	0.89	0.67	0.26	0.68	0.49	0.44	0.75	0.35	0.78	0.13
Control Delay (s/veh)	38.9	33.6	3.6	35.5	42.7	35.3	50.3	33.0	54.5	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	33.6	3.6	35.5	42.7	35.3	50.3	33.0	54.5	0.6
Queue Length 50th (m)	105.3	135.5	0.0	27.7	64.3	16.8	98.3	13.4	97.7	0.0
Queue Length 95th (m)	#161.4	149.2	14.6	#49.4	79.0	31.0	125.4	26.3	122.6	0.0
Internal Link Dist (m)		1488.3			1354.7		3072.6		2095.2	
Turn Bay Length (m)	110.0		100.0	300.0		65.0		70.0		70.0
Base Capacity (vph)	670	1641	844	300	1017	210	967	206	944	449
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.66	0.26	0.67	0.47	0.44	0.74	0.35	0.74	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	564	1057	212	196	381	87	91	576	127	71	686	55
Future Volume (vph)	564	1057	212	196	381	87	91	576	127	71	686	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.6	4.6	3.0	4.6		3.0	4.4		3.0	4.4	4.4
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1789	3579	1585	1789	3357		1706	3321		1630	3411	1296
Flt Permitted	0.31	1.00	1.00	0.20	1.00		0.15	1.00		0.17	1.00	1.00
Satd. Flow (perm)	578	3579	1585	379	3357		263	3321		296	3411	1296
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	576	1079	216	200	389	89	93	588	130	72	700	56
RTOR Reduction (vph)	0	0	120	0	14	0	0	14	0	0	0	41
Lane Group Flow (vph)	576	1079	96	200	464	0	93	704	0	72	700	15
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		4
Actuated Green, G (s)	77.1	59.9	59.9	51.0	37.8		48.1	37.9		43.7	35.7	35.7
Effective Green, g (s)	78.1	61.9	61.9	53.0	39.8		50.1	39.9		45.7	37.7	37.7
Actuated g/C Ratio	0.56	0.44	0.44	0.38	0.28		0.36	0.28		0.33	0.27	0.27
Clearance Time (s)	4.5	6.6	6.6	4.0	6.6		4.0	6.4		4.0	6.4	6.4
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	632	1582	700	286	954		209	946		182	918	348
v/s Ratio Prot	c0.23	0.30		0.07	0.14		c0.04	c0.21		0.03	0.21	
v/s Ratio Perm	c0.28		0.06	0.19			0.12			0.10		0.01
v/c Ratio	0.91	0.68	0.14	0.70	0.49		0.44	0.74		0.40	0.76	0.04
Uniform Delay, d1	22.5	31.2	23.2	30.9	41.6		32.9	45.4		34.8	47.0	37.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	18.3	2.4	0.4	9.2	1.8		3.1	3.9		2.9	4.5	0.1
Delay (s)	40.7	33.6	23.6	40.1	43.4		36.1	49.3		37.8	51.5	37.9
Level of Service	D	C	C	D	D		D	D		D	D	D
Approach Delay (s/veh)		34.6			42.4			47.8			49.4	
Approach LOS		C			D			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	41.4	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.85				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.5		
Intersection Capacity Utilization	87.9%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	1186	62	62	661	5	15	0	40	2	0	7
Future Volume (vph)	12	1186	62	62	661	5	15	0	40	2	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	90.0		0.0	40.0		0.0	40.0		0.0
Storage Lanes	1		0	2		0	1		0	1		0
Taper Length (m)	90.0			90.0			30.0			30.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.999			0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	3550	0	1825	3474	0	1825	1555	0	1217	1420	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1285	3550	0	1825	3474	0	1825	1555	0	1217	1420	0
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		1378.7			1167.6			3084.0			998.7	
Travel Time (s)		62.0			52.5			158.6			51.4	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	0%	5%	50%	0%	15%
Adj. Flow (vph)	13	1235	65	65	689	5	16	0	42	2	0	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	1300	0	65	694	0	16	42	0	2	7	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	1186	62	62	661	5	15	0	40	2	0	7
Future Volume (Veh/h)	12	1186	62	62	661	5	15	0	40	2	0	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	12	1235	65	65	689	5	16	0	42	2	0	7
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	694			1300			1773	2116	650	1505	2146	347
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	694			1300			1773	2116	650	1505	2146	347
tC, single (s)	4.9			4.1			7.5	6.5	7.0	8.5	6.5	7.2
tC, 2 stage (s)												
tF (s)	2.6			2.2			3.5	4.0	3.4	4.0	4.0	3.4
p0 queue free %	98			88			66	100	90	95	100	99
cM capacity (veh/h)	675			540			48	44	405	43	42	613

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	12	823	477	65	459	235	16	42	2	7
Volume Left	12	0	0	65	0	0	16	0	2	0
Volume Right	0	0	65	0	0	5	0	42	0	7
cSH	675	1700	1700	540	1700	1700	48	405	43	613
Volume to Capacity	0.02	0.48	0.28	0.12	0.27	0.14	0.34	0.10	0.05	0.01
Queue Length 95th (m)	0.4	0.0	0.0	3.1	0.0	0.0	8.9	2.6	1.1	0.3
Control Delay (s/veh)	10.4	0.0	0.0	12.6	0.0	0.0	115.2	14.9	93.7	10.9
Lane LOS	B			B			F	B	F	B
Approach Delay (s/veh)	0.1			1.1			42.6		29.3	
Approach LOS							E		D	

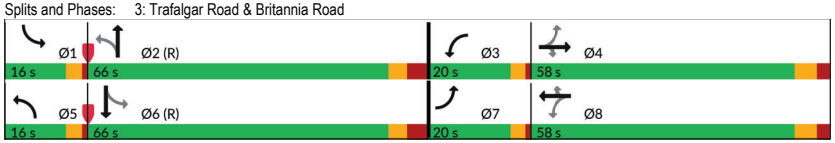
Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	550	281	139	248	62	126	645	155	32	958	65
Future Volume (vph)	119	550	281	139	248	62	126	645	155	32	958	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		45.0	70.0		35.0	100.0		0.0	100.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	85.0			95.0			50.0			50.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.971			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	5092	1555	1807	5043	1633	1601	3368	0	1615	3417	0
Flt Permitted	0.546			0.221			0.196			0.309		
Satd. Flow (perm)	999	5092	1555	420	5043	1633	330	3368	0	525	3417	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			251			85		21			5	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3112.8			3096.6	
Travel Time (s)		83.9			81.7			186.8			185.8	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	120	556	284	140	251	63	127	652	157	32	968	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	556	284	140	251	63	127	809	0	32	1034	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0		6.1	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6		6.1	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0		7.0	20.0	
Minimum Split (s)	11.5	42.9	42.9	11.0	42.9	42.9	11.0	48.5		11.0	48.5	
Total Split (s)	20.0	58.0	58.0	20.0	58.0	58.0	16.0	66.0		16.0	66.0	
Total Split (%)	12.5%	36.3%	36.3%	12.5%	36.3%	36.3%	10.0%	41.3%		10.0%	41.3%	
Maximum Green (s)	16.0	51.1	51.1	16.0	51.1	51.1	12.0	58.5		12.0	58.5	
Yellow Time (s)	3.0	4.2	4.2	3.0	4.2	4.2	3.0	3.7		3.0	3.7	
All-Red Time (s)	1.0	2.7	2.7	1.0	2.7	2.7	1.0	3.8		1.0	3.8	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-2.0	
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	5.5		3.0	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0	26.0		26.0	26.0		34.0			34.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	42.5	26.2	26.2	43.3	26.6	26.6	107.8	96.6		101.9	91.2	
Actuated g/C Ratio	0.27	0.16	0.16	0.27	0.17	0.17	0.67	0.60		0.64	0.57	
v/c Ratio	0.36	0.67	0.61	0.58	0.30	0.18	0.41	0.40		0.08	0.53	
Control Delay (s/veh)	45.7	66.7	15.8	52.9	58.9	5.5	14.0	17.9		10.7	23.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	45.7	66.7	15.8	52.9	58.9	5.5	14.0	17.9		10.7	23.6	
LOS	D	E	B	D	E	A	B	B		B	C	
Approach Delay (s/veh)		49.0			49.7			17.4			23.2	
Approach LOS		D			D			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 160			
Offset: 12 (8%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay (s/veh): 32.4		Intersection LOS: C	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	120	556	284	140	251	63	127	809	32	1034
v/c Ratio	0.36	0.67	0.61	0.58	0.30	0.18	0.41	0.40	0.08	0.53
Control Delay (s/veh)	45.7	66.7	15.8	52.9	58.9	5.5	14.0	17.9	10.7	23.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.7	66.7	15.8	52.9	58.9	5.5	14.0	17.9	10.7	23.6
Queue Length 50th (m)	30.6	63.3	9.5	34.9	26.9	0.0	14.9	71.6	3.5	106.3
Queue Length 95th (m)	45.8	74.4	39.3	50.7	35.4	7.4	27.6	98.4	8.8	150.8
Internal Link Dist (m)		1374.7			1337.0			3088.8		3072.6
Turn Bay Length (m)	75.0		45.0	70.0		35.0	100.0		100.0	
Base Capacity (vph)	355	1689	683	265	1673	598	331	2042	436	1949
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.33	0.42	0.53	0.15	0.11	0.38	0.40	0.07	0.53

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	550	281	139	248	62	126	645	155	32	958	65
Future Volume (vph)	119	550	281	139	248	62	126	645	155	32	958	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	5.5		3.0	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1738	5092	1555	1807	5043	1633	1601	3368		1615	3418	
Flt Permitted	0.55	1.00	1.00	0.22	1.00	1.00	0.20	1.00		0.31	1.00	
Satd. Flow (perm)	999	5092	1555	419	5043	1633	330	3368		525	3418	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	120	556	284	140	251	63	127	652	157	32	968	66
RTOR Reduction (vph)	0	0	210	0	0	53	0	8	0	0	2	0
Lane Group Flow (vph)	120	556	74	140	251	10	127	801	0	32	1032	0
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	37.6	24.2	24.2	38.4	24.6	24.6	103.6	93.8		94.9	89.1	
Effective Green, g (s)	39.6	26.2	26.2	40.4	26.6	26.6	104.6	95.8		96.9	91.1	
Actuated g/C Ratio	0.25	0.16	0.16	0.25	0.17	0.17	0.65	0.60		0.61	0.57	
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	7.5		4.0	7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)	313	833	254	234	838	271	307	2016		364	1946	
v/s Ratio Prot	0.03	c0.11		c0.06	0.05		c0.03	0.24		0.00	c0.30	
v/s Ratio Perm	0.06		0.05	0.10		0.01	0.24			0.05		
v/c Ratio	0.38	0.67	0.29	0.60	0.30	0.04	0.41	0.40		0.09	0.53	
Uniform Delay, d1	48.7	62.8	58.8	49.0	58.5	56.0	13.6	16.9		13.0	21.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	2.0	0.6	4.1	0.2	0.1	0.9	0.6		0.1	1.0	
Delay (s)	49.5	64.8	59.4	53.1	58.7	56.0	14.5	17.5		13.1	22.3	
Level of Service	D	E	E	D	E	E	B	B		B	C	
Approach Delay (s/veh)		61.3			56.6			17.1			22.0	
Approach LOS		E			E			B			C	

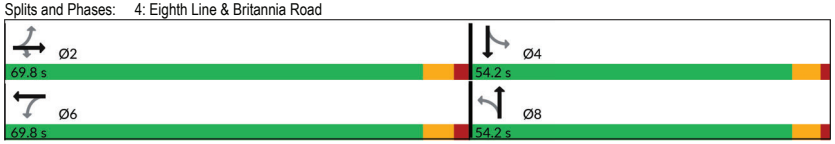
Intersection Summary				
HCM 2000 Control Delay (s/veh)	36.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.4	
Intersection Capacity Utilization	75.2%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	719	8	16	423	11	12	34	18	25	70	15
Future Volume (vph)	17	719	8	16	423	11	12	34	18	25	70	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	35.0		40.0	45.0		120.0	40.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			60.0			35.0			50.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.996			0.948			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	5092	1306	1825	5075	0	1674	1752	0	1825	1869	0
Flt Permitted	0.477			0.350			0.784			0.784		
Satd. Flow (perm)	916	5092	1306	672	5075	0	1382	1752	0	1506	1869	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			24		5			19			10	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3091.5			3084.0	
Travel Time (s)		81.7			84.5			159.0			158.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	18	765	9	17	450	12	13	36	19	27	74	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	765	9	17	462	0	13	55	0	27	90	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		
Detector Phase	2	2	2	6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	33.8	33.8	33.8	33.8	33.8		44.7	44.7		44.7	44.7	
Total Split (s)	69.8	69.8	69.8	69.8	69.8		54.2	54.2		54.2	54.2	
Total Split (%)	56.3%	56.3%	56.3%	56.3%	56.3%		43.7%	43.7%		43.7%	43.7%	
Maximum Green (s)	63.0	63.0	63.0	63.0	63.0		48.5	48.5		48.5	48.5	
Yellow Time (s)	4.6	4.6	4.6	4.6	4.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.2	2.2	2.2	2.2	2.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8		5.7	5.7		5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	20.0	20.0	20.0	20.0	20.0		32.0	32.0		32.0	32.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	24.7	24.7	24.7	24.7	24.7		10.5	10.5		10.5	10.5	
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.68		0.29	0.29		0.29	0.29	
v/c Ratio	0.03	0.22	0.01	0.04	0.13		0.03	0.11		0.06	0.16	
Control Delay (s/veh)	6.4	5.4	1.6	6.6	5.1		13.0	10.3		13.2	12.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	6.4	5.4	1.6	6.6	5.1		13.0	10.3		13.2	12.4	
LOS	A	A	A	A	A		B	B		B	B	
Approach Delay (s/veh)		5.4			5.2			10.8			12.6	
Approach LOS		A			A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 124			
Actuated Cycle Length: 36.2			
Natural Cycle: 80			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.22			
Intersection Signal Delay (s/veh): 6.2		Intersection LOS: A	
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	18	765	9	17	462	13	55	27	90
v/c Ratio	0.03	0.22	0.01	0.04	0.13	0.03	0.11	0.06	0.16
Control Delay (s/veh)	6.4	5.4	1.6	6.6	5.1	13.0	10.3	13.2	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.4	5.4	1.6	6.6	5.1	13.0	10.3	13.2	12.4
Queue Length 50th (m)	0.7	11.7	0.0	0.6	6.5	0.8	2.2	1.5	4.7
Queue Length 95th (m)	2.8	17.6	1.1	2.8	10.6	3.8	8.3	5.7	12.6
Internal Link Dist (m)		1337.0			1384.0		3067.5		3060.0
Turn Bay Length (m)	35.0		40.0	45.0		40.0		30.0	
Base Capacity (vph)	916	5092	1306	672	5075	1382	1752	1506	1869
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.15	0.01	0.03	0.09	0.01	0.03	0.02	0.05

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	719	8	16	423	11	12	34	18	25	70	15
Future Volume (vph)	17	719	8	16	423	11	12	34	18	25	70	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	5092	1306	1825	5076		1674	1753		1825	1870	
Flt Permitted	0.48	1.00	1.00	0.35	1.00		0.78	1.00		0.78	1.00	
Satd. Flow (perm)	916	5092	1306	672	5076		1382	1753		1507	1870	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	18	765	9	17	450	12	13	36	19	27	74	16
RTOR Reduction (vph)	0	0	4	0	2	0	0	16	0	0	9	0
Lane Group Flow (vph)	18	765	5	17	460	0	13	39	0	27	81	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	21.0	21.0	21.0	21.0	21.0		5.1	5.1		5.1	5.1	
Effective Green, g (s)	21.0	21.0	21.0	21.0	21.0		5.1	5.1		5.1	5.1	
Actuated g/C Ratio	0.54	0.54	0.54	0.54	0.54		0.13	0.13		0.13	0.13	
Clearance Time (s)	6.8	6.8	6.8	6.8	6.8		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	498	2770	710	365	2761		182	231		199	247	
v/s Ratio Prot		c0.15			0.09			0.02			c0.04	
v/s Ratio Perm	0.02		0.00	0.03			0.01			0.02		
v/c Ratio	0.04	0.28	0.01	0.05	0.17		0.07	0.17		0.14	0.33	
Uniform Delay, d1	4.1	4.7	4.0	4.1	4.4		14.7	14.9		14.8	15.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1	0.0	0.1	0.0		0.2	0.3		0.3	0.8	
Delay (s)	4.1	4.8	4.0	4.2	4.4		14.8	15.2		15.1	16.0	
Level of Service	A	A	A	A	A		B	B		B	B	
Approach Delay (s/veh)		4.8			4.4			15.1			15.8	
Approach LOS		A			A			B			B	

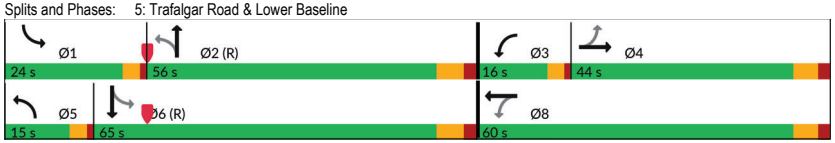
Intersection Summary				
HCM 2000 Control Delay (s/veh)	6.0	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	266	53	185	111	94	29	765	138	255	1115	45
Future Volume (vph)	93	266	53	185	111	94	29	765	138	255	1115	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	110.0		0.0	90.0		0.0	90.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	100.0			100.0			100.0			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.975			0.931			0.977			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	1852	0	1789	1723	0	1706	3352	0	1789	3455	0
Flt Permitted	0.624			0.195			0.159			0.159		
Satd. Flow (perm)	1142	1852	0	367	1723	0	285	3352	0	299	3455	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			36			17			4	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1436.5			913.5			3112.8	
Travel Time (s)		79.0			86.2			54.8			186.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	97	277	55	193	116	98	30	797	144	266	1161	47
Shared Lane Traffic (%)												
Lane Group Flow (vph)	97	332	0	193	214	0	30	941	0	266	1208	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	25.0		7.0	25.0	
Minimum Split (s)	16.2	16.2		11.0	24.2		11.0	31.6		11.0	31.6	
Total Split (s)	44.0	44.0		16.0	60.0		15.0	56.0		24.0	65.0	
Total Split (%)	31.4%	31.4%		11.4%	42.9%		10.7%	40.0%		17.1%	46.4%	
Maximum Green (s)	37.8	37.8		12.0	53.8		11.0	49.4		20.0	58.4	
Yellow Time (s)	4.2	4.2		3.0	4.2		3.0	4.6		3.0	4.6	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	
Total Lost Time (s)	5.2	4.2		3.0	4.2		3.0	4.6		3.0	4.6	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	32.2	33.2		51.3	50.1		68.8	59.0		82.7	74.3	
Actuated g/C Ratio	0.23	0.24		0.37	0.36		0.49	0.42		0.59	0.53	
v/c Ratio	0.37	0.75		0.70	0.33		0.13	0.66		0.70	0.66	
Control Delay (s/veh)	48.2	58.8		45.1	27.5		16.1	36.2		28.0	27.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	48.2	58.8		45.1	27.5		16.1	36.2		28.0	27.9	
LOS	D	E		D	C		B	D		C	C	
Approach Delay (s/veh)		56.4			35.9			35.6			27.9	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 20 (14%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 34.9		Intersection LOS: C	
Intersection Capacity Utilization 81.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	97	332	193	214	30	941	266	1208
v/c Ratio	0.37	0.75	0.70	0.33	0.13	0.66	0.70	0.66
Control Delay (s/veh)	48.2	58.8	45.1	27.5	16.1	36.2	28.0	27.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.2	58.8	45.1	27.5	16.1	36.2	28.0	27.9
Queue Length 50th (m)	23.6	84.6	36.9	34.7	3.7	118.9	36.6	143.7
Queue Length 95th (m)	39.2	112.4	54.4	53.6	9.0	151.2	65.0	179.8
Internal Link Dist (m)		1293.1		1412.5		889.5		3088.8
Turn Bay Length (m)	45.0		110.0		90.0		90.0	
Base Capacity (vph)	316	531	277	708	269	1423	403	1834
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.63	0.70	0.30	0.11	0.66	0.66	0.66

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	93	266	53	185	111	94	29	765	138	255	1115	45
Future Volume (vph)	93	266	53	185	111	94	29	765	138	255	1115	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.2		3.0	4.2		3.0	4.6		3.0	4.6	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.93		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1738	1852		1789	1723		1706	3352		1789	3456	
Flt Permitted	0.62	1.00		0.19	1.00		0.16	1.00		0.16	1.00	
Satd. Flow (perm)	1142	1852		367	1723		285	3352		299	3456	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	97	277	55	193	116	98	30	797	144	266	1161	47
RTOR Reduction (vph)	0	5	0	0	23	0	0	10	0	0	2	0
Lane Group Flow (vph)	97	327	0	193	191	0	30	931	0	266	1206	0
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.2	31.2		48.1	48.1		61.4	57.0		79.1	70.7	
Effective Green, g (s)	32.2	33.2		49.1	50.1		63.4	59.0		80.1	72.7	
Actuated g/C Ratio	0.23	0.24		0.35	0.36		0.45	0.42		0.57	0.52	
Clearance Time (s)	6.2	6.2		4.0	6.2		4.0	6.6		4.0	6.6	
Vehicle Extension (s)	5.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)	262	439		269	616		183	1412		374	1794	
v/s Ratio Prot		0.18		c0.07	0.11		0.01	0.28		c0.10	0.35	
v/s Ratio Perm	0.08			c0.18			0.07			c0.31		
v/c Ratio	0.37	0.74		0.72	0.31		0.16	0.66		0.71	0.67	
Uniform Delay, d1	45.4	49.5		35.4	32.5		22.6	32.5		20.7	24.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.8	8.0		8.8	0.6		0.4	2.4		6.3	2.0	
Delay (s)	47.2	57.5		44.2	33.1		23.1	34.9		27.0	26.9	
Level of Service	D	E		D	C		C	C		C	C	
Approach Delay (s/veh)		55.2			38.3			34.5			26.9	
Approach LOS		E			D			C			C	

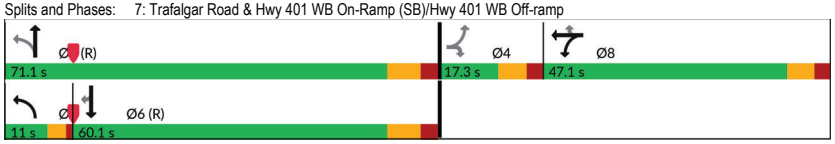
Intersection Summary				
HCM 2000 Control Delay (s/veh)	34.3	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.8	
Intersection Capacity Utilization	81.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	4	167	6	280	10	396	0	0	1017	117
Future Volume (vph)	0	0	4	167	6	280	10	396	0	0	1017	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1281	0	1633	2879	1921	2456	1825	3120	0	0	3411	1276
Flt Permitted				0.950			0.218					
Satd. Flow (perm)	1281	0	1633	2879	1921	2456	419	3120	0	0	3411	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			292			298						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			465.4			196.9			254.2	
Travel Time (s)		69.9			27.9			11.8			13.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	50%	0%	0%	23%	0%	17%	0%	17%	0%	0%	7%	28%
Adj. Flow (vph)	0	0	4	178	6	298	11	421	0	0	1082	124
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	4	178	6	298	11	421	0	0	1082	124
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	13.1	13.1	13.1	107.9	103.8			99.4	99.4
Actuated g/C Ratio			0.07	0.10	0.10	0.10	0.80	0.77			0.73	0.73
v/c Ratio			0.01	0.64	0.03	0.59	0.03	0.18			0.43	0.13
Control Delay (s/veh)			0.0	69.4	53.8	10.9	5.1	5.5			9.8	2.3
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.0	69.4	53.8	10.9	5.1	5.5			9.8	2.3
LOS			A	E	D	B	A	A			A	A
Approach Delay (s/veh)					33.1			5.4			9.0	
Approach LOS					C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 13.7		Intersection LOS: B	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	4	178	6	298	11	421	1082	124
v/c Ratio	0.01	0.64	0.03	0.59	0.03	0.18	0.43	0.13
Control Delay (s/veh)	0.0	69.4	53.8	10.9	5.1	5.5	9.8	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.0	69.4	53.8	10.9	5.1	5.5	9.8	2.3
Queue Length 50th (m)	0.0	28.5	1.5	0.0	0.4	13.5	40.9	0.0
Queue Length 95th (m)	0.0	41.8	5.8	16.3	3.0	35.5	122.4	10.8
Internal Link Dist (m)			441.4			172.9	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	390	849	567	935	406	2389	2501	968
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.21	0.01	0.32	0.03	0.18	0.43	0.13

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	4	167	6	280	10	396	0	0	1017	117
Future Volume (vph)	0	0	4	167	6	280	10	396	0	0	1017	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	0.95			0.95	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3120			3411	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.22	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	420	3120			3411	1276
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	4	178	6	298	11	421	0	0	1082	124
RTOR Reduction (vph)	0	0	4	0	0	269	0	0	0	0	0	41
Lane Group Flow (vph)	0	0	0	178	6	29	11	421	0	0	1082	83
Heavy Vehicles (%)	50%	0%	0%	23%	0%	17%	0%	17%	0%	0%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	13.1	13.1	13.1	97.9	97.9			91.1	91.1
Effective Green, g (s)			2.0	13.1	13.1	13.1	97.9	97.9			91.1	91.1
Actuated g/C Ratio			0.01	0.10	0.10	0.10	0.72	0.72			0.67	0.67
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	278	185	237	332	2254			2293	857
v/s Ratio Prot				c0.06	0.00		0.00	c0.13			c0.32	
v/s Ratio Perm			c0.00			0.01	0.02					0.07
v/c Ratio			0.00	0.64	0.03	0.12	0.03	0.19			0.47	0.10
Uniform Delay, d1			65.8	58.9	55.5	55.9	6.3	6.0			10.7	7.8
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.0	3.7	0.0	0.1	0.0	0.2			0.7	0.2
Delay (s)			65.8	62.7	55.5	56.0	6.3	6.2			11.4	8.0
Level of Service			E	E	E	E	A	A			B	A
Approach Delay (s/veh)		65.8			58.5			6.2			11.0	
Approach LOS		E			E			A			B	

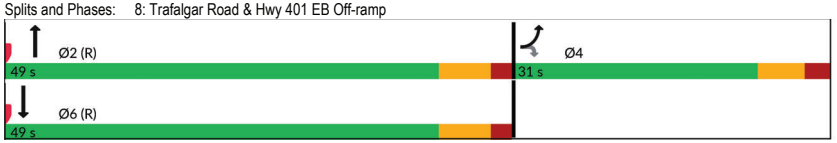
Intersection Summary				
HCM 2000 Control Delay (s/veh)	20.9	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.48			
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5	
Intersection Capacity Utilization	63.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	389	0	633	502	0
Future Volume (vph)	114	389	0	633	502	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	0.95	0.95	1.00
Frt	0.905	0.850				
Flt Protected	0.982					
Satd. Flow (prot)	2926	1339	0	3288	3259	0
Flt Permitted	0.982					
Satd. Flow (perm)	2926	1339	0	3288	3259	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	197	196				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	202.7	
Travel Time (s)	31.9			4.6	10.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	17%	11%	0%	11%	12%	0%
Adj. Flow (vph)	115	393	0	639	507	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	312	196	0	639	507	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	10.8	10.8		55.2	55.2	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
v/c Ratio	0.55	0.56		0.28	0.23	
Control Delay (s/veh)	16.1	11.7		5.3	5.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	16.1	11.7		5.3	5.0	
LOS	B	B		A	A	
Approach Delay (s/veh)	14.4			5.3	5.0	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 8.0		Intersection LOS: A	
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	312	196	639	507
v/c Ratio	0.55	0.56	0.28	0.23
Control Delay (s/veh)	16.1	11.7	5.3	5.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.1	11.7	5.3	5.0
Queue Length 50th (m)	9.4	0.0	17.2	13.2
Queue Length 95th (m)	21.1	19.8	28.9	22.7
Internal Link Dist (m)	507.7		52.4	178.7
Turn Bay Length (m)		125.0		
Base Capacity (vph)	1015	538	2267	2247
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.31	0.36	0.28	0.23

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	389	0	633	502	0
Future Volume (vph)	114	389	0	633	502	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.91	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2926	1339		3288	3259	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2926	1339		3288	3259	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	115	393	0	639	507	0
RTOR Reduction (vph)	170	170	0	0	0	0
Lane Group Flow (vph)	142	26	0	639	507	0
Heavy Vehicles (%)	17%	11%	0%	11%	12%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	10.8	10.8		55.2	55.2	
Effective Green, g (s)	10.8	10.8		55.2	55.2	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	395	180		2268	2248	
v/s Ratio Prot	c0.05			c0.19	0.16	
v/s Ratio Perm		0.02				
v/c Ratio	0.36	0.15		0.28	0.23	
Uniform Delay, d1	31.5	30.5		4.8	4.6	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.3	0.2	
Delay (s)	32.0	30.9		5.1	4.8	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	31.6			5.1	4.8	
Approach LOS	C			A	A	

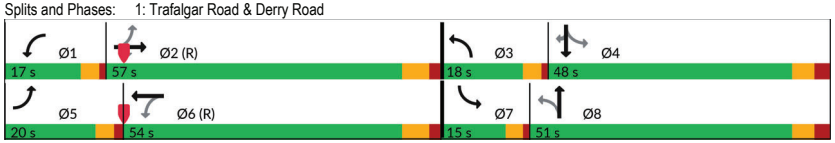
Intersection Summary				
HCM 2000 Control Delay (s/veh)	13.1	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	45.7%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	548	136	204	1270	57	249	722	109	74	609	401
Future Volume (vph)	125	548	136	204	1270	57	249	722	109	74	609	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	110.0		100.0	300.0		0.0	65.0		0.0	70.0		70.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	100.0			100.0			100.0			100.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.994			0.980				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	3544	1570	1807	3591	0	1772	3391	0	1789	3444	1601
Flt Permitted	0.074			0.337			0.202			0.121		
Satd. Flow (perm)	135	3544	1570	641	3591	0	377	3391	0	228	3444	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			143		4			13				227
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		1512.3			1378.7			3096.6			2119.2	
Travel Time (s)		68.1			62.0			185.8			127.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	132	577	143	215	1337	60	262	760	115	78	641	422
Shared Lane Traffic (%)												
Lane Group Flow (vph)	132	577	143	215	1397	0	262	875	0	78	641	422
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0		2.0	10.0		6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6		2.0	0.6		6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		4
Detector Phase	5	2	2	1	6		3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0		7.0	20.0		7.0	20.0	20.0
Minimum Split (s)	11.5	39.6	39.6	11.0	39.6		11.0	37.4		11.0	37.4	37.4
Total Split (s)	20.0	57.0	57.0	17.0	54.0		18.0	51.0		15.0	48.0	48.0
Total Split (%)	14.3%	40.7%	40.7%	12.1%	38.6%		12.9%	36.4%		10.7%	34.3%	34.3%
Maximum Green (s)	15.5	50.4	50.4	13.0	47.4		14.0	44.6		11.0	41.6	41.6
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6		3.0	3.7		3.0	3.7	3.7
All-Red Time (s)	1.5	2.0	2.0	1.0	2.0		1.0	2.7		1.0	2.7	2.7
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.6	4.6	3.0	4.6		3.0	4.4		3.0	4.4	4.4
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min		None	None		None	None	None
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	7.0
Flash Don't Walk (s)		26.0	26.0		26.0			24.0			24.0	24.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	70.5	55.3	55.3	70.4	54.8		60.0	44.3		53.4	40.6	40.6
Actuated g/C Ratio	0.50	0.40	0.40	0.50	0.39		0.43	0.32		0.38	0.29	0.29
v/c Ratio	0.58	0.41	0.20	0.49	0.99		0.84	0.81		0.37	0.64	0.68
Control Delay (s/veh)	35.2	32.4	5.1	22.7	64.4		51.2	49.8		28.1	46.2	24.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay (s/veh)	35.2	32.4	5.1	22.7	64.4		51.2	49.8		28.1	46.2	24.8
LOS	D	C	A	C	E		D	D		C	D	C
Approach Delay (s/veh)		28.2			58.9			50.1			37.1	
Approach LOS		C			E			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.99		
Intersection Signal Delay (s/veh): 46.0		Intersection LOS: D
Intersection Capacity Utilization 88.6%		ICU Level of Service E
Analysis Period (min) 15		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	132	577	143	215	1397	262	875	78	641	422
v/c Ratio	0.58	0.41	0.20	0.49	0.99	0.84	0.81	0.37	0.64	0.68
Control Delay (s/veh)	35.2	32.4	5.1	22.7	64.4	51.2	49.8	28.1	46.2	24.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.2	32.4	5.1	22.7	64.4	51.2	49.8	28.1	46.2	24.8
Queue Length 50th (m)	20.4	64.0	0.0	32.7	~223.6	47.2	118.0	12.4	83.0	47.4
Queue Length 95th (m)	42.0	80.8	14.2	48.9	#276.0	#77.0	144.5	22.6	103.9	85.0
Internal Link Dist (m)		1488.3			1354.7		3072.6		2095.2	
Turn Bay Length (m)	110.0		100.0	300.0		65.0		70.0		70.0
Base Capacity (vph)	259	1400	707	442	1408	311	1137	221	1072	654
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.41	0.20	0.49	0.99	0.84	0.77	0.35	0.60	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	548	136	204	1270	57	249	722	109	74	609	401
Future Volume (vph)	125	548	136	204	1270	57	249	722	109	74	609	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.6	4.6	3.0	4.6		3.0	4.4		3.0	4.4	4.4
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1738	3544	1570	1807	3589		1772	3392		1789	3444	1601
Flt Permitted	0.07	1.00	1.00	0.34	1.00		0.20	1.00		0.12	1.00	1.00
Satd. Flow (perm)	135	3544	1570	642	3589		377	3392		228	3444	1601
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	132	577	143	215	1337	60	262	760	115	78	641	422
RTOR Reduction (vph)	0	0	86	0	2	0	0	9	0	0	0	161
Lane Group Flow (vph)	132	577	57	215	1395	0	262	866	0	78	641	261
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6			8			4		4
Actuated Green, G (s)	66.4	53.4	53.4	65.9	52.9		56.3	42.3		48.9	38.6	38.6
Effective Green, g (s)	68.4	55.4	55.4	67.9	54.9		57.6	44.3		50.9	40.6	40.6
Actuated g/C Ratio	0.49	0.40	0.40	0.49	0.39		0.41	0.32		0.36	0.29	0.29
Clearance Time (s)	4.5	6.6	6.6	4.0	6.6		4.0	6.4		4.0	6.4	6.4
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Lane Grp Cap (vph)	226	1402	621	427	1407		304	1073		208	998	464
v/s Ratio Prot	c0.06	0.16		0.05	c0.39		c0.09	0.26		0.03	0.19	
v/s Ratio Perm	0.23		0.04	0.19			c0.26			0.11		0.16
v/c Ratio	0.58	0.41	0.09	0.50	0.99		0.86	0.81		0.38	0.64	0.56
Uniform Delay, d1	29.6	30.5	26.5	21.8	42.3		31.0	43.9		32.2	43.4	42.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.9	0.9	0.3	1.9	22.0		23.0	5.2		2.4	1.9	2.6
Delay (s)	35.4	31.4	26.8	23.7	64.3		54.0	49.1		34.5	45.3	44.7
Level of Service	D	C	C	C	E		D	D		C	D	D
Approach Delay (s/veh)		31.3			58.9			50.2			44.4	
Approach LOS		C			E			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	48.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	704	21	48	1497	2	38	0	48	2	3	5
Future Volume (vph)	2	704	21	48	1497	2	38	0	48	2	3	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		0.0	90.0		0.0	40.0		0.0	40.0		0.0
Storage Lanes	1		0	2		0	1		0	1		0
Taper Length (m)	90.0			90.0			30.0			30.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996						0.850			0.906	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	3561	0	1825	3614	0	1825	1633	0	1825	1741	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1825	3561	0	1825	3614	0	1825	1633	0	1825	1741	0
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		1378.7			1167.6			3084.0			998.7	
Travel Time (s)		62.0			52.5			158.6			51.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	2	711	21	48	1512	2	38	0	48	2	3	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	2	732	0	48	1514	0	38	48	0	2	8	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	704	21	48	1497	2	38	0	48	2	3	5
Future Volume (Veh/h)	2	704	21	48	1497	2	38	0	48	2	3	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Hourly flow rate (vph)	2	711	21	48	1512	2	38	0	48	2	3	5
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	1514			732			1584	2336	366	2017	2345	757
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1514			732			1584	2336	366	2017	2345	757
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			42	100	92	94	91	99
cM capacity (veh/h)	447			882			65	35	637	31	35	355

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	2	474	258	48	1008	506	38	48	2	8
Volume Left	2	0	0	48	0	0	38	0	2	0
Volume Right	0	0	21	0	0	2	0	48	0	5
cSH	447	1700	1700	882	1700	1700	65	637	31	79
Volume to Capacity	0.00*	0.28	0.15	0.05	0.59	0.30	0.58	0.08	0.06	0.10
Queue Length 95th (m)	0.1	0.0	0.0	1.3	0.0	0.0	18.5	1.9	1.5	2.5
Control Delay (s/veh)	13.1	0.0	0.0	9.3	0.0	0.0	118.3	11.1	128.8	55.5
Lane LOS	B			A			F	B	F	F
Approach Delay (s/veh)	0.0			0.3			58.5		70.1	
Approach LOS							F		F	

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	415	146	114	607	75	327	904	125	60	700	182
Future Volume (vph)	84	415	146	114	607	75	327	904	125	60	700	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	75.0		45.0	70.0		35.0	100.0		0.0	100.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	85.0			95.0			50.0			50.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850			0.850		0.982			0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1573	5092	1585	1825	5193	1541	1789	3455	0	1738	3375	0
Flt Permitted	0.186			0.330			0.186			0.263		
Satd. Flow (perm)	308	5092	1585	634	5193	1541	350	3455	0	481	3375	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			152			112		12			21	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3112.8			3096.6	
Travel Time (s)		83.9			81.7			186.8			185.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	88	432	152	119	632	78	341	942	130	63	729	190
Shared Lane Traffic (%)												
Lane Group Flow (vph)	88	432	152	119	632	78	341	1072	0	63	919	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0		6.1	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6		6.1	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0		7.0	20.0	
Minimum Split (s)	11.5	42.9	42.9	11.0	42.9	42.9	11.0	48.5		11.0	48.5	
Total Split (s)	20.0	52.0	52.0	20.0	52.0	52.0	34.0	72.0		16.0	54.0	
Total Split (%)	12.5%	32.5%	32.5%	12.5%	32.5%	32.5%	21.3%	45.0%		10.0%	33.8%	
Maximum Green (s)	16.0	45.1	45.1	16.0	45.1	45.1	30.0	64.5		12.0	46.5	
Yellow Time (s)	3.0	4.2	4.2	3.0	4.2	4.2	3.0	3.7		3.0	3.7	
All-Red Time (s)	1.0	2.7	2.7	1.0	2.7	2.7	1.0	3.8		1.0	3.8	
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0		-1.0	-2.0	
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	5.5		3.0	5.5	
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Recall Mode	None	None	None	None	None	None	None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)		26.0	26.0		26.0	26.0		34.0			34.0	
Pedestrian Calls (#/hr)		0	0		0	0		0			0	
Act Effct Green (s)	41.9	26.8	26.8	43.6	27.6	27.6	108.3	96.1		83.6	72.2	
Actuated g/C Ratio	0.26	0.17	0.17	0.27	0.17	0.17	0.68	0.60		0.52	0.45	
v/c Ratio	0.48	0.51	0.39	0.43	0.71	0.22	0.67	0.52		0.20	0.60	
Control Delay (s/veh)	50.3	62.3	10.4	47.1	66.8	4.0	21.6	20.9		14.5	36.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	50.3	62.3	10.4	47.1	66.8	4.0	21.6	20.9		14.5	36.8	
LOS	D	E	B	D	E	A	C	C		B	D	
Approach Delay (s/veh)		49.0			58.0			21.1			35.4	
Approach LOS		D			E			C			D	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 30 (19%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay (s/veh): 37.4 Intersection LOS: D
Intersection Capacity Utilization 81.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: Trafalgar Road & Britannia Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	88	432	152	119	632	78	341	1072	63	919
v/c Ratio	0.48	0.51	0.39	0.43	0.71	0.22	0.67	0.52	0.20	0.60
Control Delay (s/veh)	50.3	62.3	10.4	47.1	66.8	4.0	21.6	20.9	14.5	36.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.3	62.3	10.4	47.1	66.8	4.0	21.6	20.9	14.5	36.8
Queue Length 50th (m)	24.0	47.6	0.0	29.0	70.8	0.0	41.7	105.8	6.6	117.8
Queue Length 95th (m)	37.9	57.5	19.6	43.0	82.3	5.5	82.1	145.9	14.5	170.5
Internal Link Dist (m)		1374.7			1337.0			3088.8		3072.6
Turn Bay Length (m)	75.0		45.0	70.0		35.0	100.0		100.0	
Base Capacity (vph)	220	1498	573	304	1528	532	540	2079	366	1535
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.29	0.27	0.39	0.41	0.15	0.63	0.52	0.17	0.60

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	415	146	114	607	75	327	904	125	60	700	182
Future Volume (vph)	84	415	146	114	607	75	327	904	125	60	700	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	5.5		3.0	5.5	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1573	5092	1585	1825	5193	1541	1789	3454		1738	3375	
Flt Permitted	0.19	1.00	1.00	0.33	1.00	1.00	0.19	1.00		0.26	1.00	
Satd. Flow (perm)	308	5092	1585	634	5193	1541	350	3454		481	3375	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	88	432	152	119	632	78	341	942	130	63	729	190
RTOR Reduction (vph)	0	0	127	0	0	65	0	5	0	0	12	0
Lane Group Flow (vph)	88	432	25	119	632	13	341	1067	0	63	907	0
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	37.1	24.8	24.8	38.7	25.6	25.6	103.7	93.2		76.7	70.2	
Effective Green, g (s)	39.1	26.8	26.8	40.7	27.6	27.6	104.7	95.2		78.7	72.2	
Actuated g/C Ratio	0.24	0.17	0.17	0.25	0.17	0.17	0.65	0.60		0.49	0.45	
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	7.5		4.0	7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)	180	852	265	266	895	265	503	2055		295	1522	
v/s Ratio Prot	c0.04	0.08		c0.04	c0.12		c0.13	0.31		0.01	0.27	
v/s Ratio Perm	0.08		0.02	0.07		0.01	c0.31			0.09		
v/c Ratio	0.49	0.51	0.10	0.45	0.71	0.05	0.68	0.52		0.21	0.60	
Uniform Delay, d1	49.1	60.6	56.4	47.9	62.4	55.3	18.4	19.0		21.4	33.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	0.5	0.2	1.2	2.6	0.1	3.6	0.9		0.4	1.7	
Delay (s)	51.2	61.1	56.5	49.1	64.9	55.3	22.1	19.9		21.8	34.7	
Level of Service	D	E	E	D	E	E	C	B		C	C	
Approach Delay (s/veh)		58.7			61.8			20.4			33.9	
Approach LOS		E			E			C			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	39.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.4	
Intersection Capacity Utilization	81.6%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

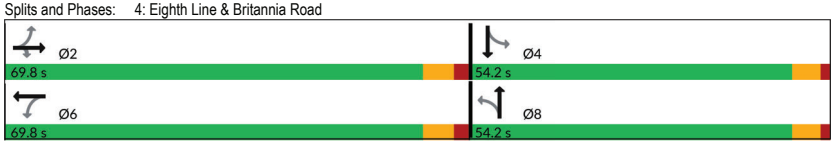
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	585	9	18	747	18	26	53	30	15	29	28
Future Volume (vph)	11	585	9	18	747	18	26	53	30	15	29	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	35.0		40.0	45.0		120.0	40.0		0.0	30.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	70.0			60.0			35.0			50.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.997			0.946			0.926	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	5092	1328	1825	5129	0	1825	1792	0	1825	1743	0
Flt Permitted	0.347			0.418			0.784			0.784		
Satd. Flow (perm)	667	5092	1328	803	5129	0	1506	1792	0	1506	1743	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			24		4			26			28	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3091.5			3084.0	
Travel Time (s)		81.7			84.5			159.0			158.6	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	11	591	9	18	755	18	26	54	30	15	29	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	591	9	18	773	0	26	84	0	15	57	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6			8			4		
Detector Phase	2	2	2	6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	33.8	33.8	33.8	33.8	33.8		44.7	44.7		44.7	44.7	
Total Split (s)	69.8	69.8	69.8	69.8	69.8		54.2	54.2		54.2	54.2	
Total Split (%)	56.3%	56.3%	56.3%	56.3%	56.3%		43.7%	43.7%		43.7%	43.7%	
Maximum Green (s)	63.0	63.0	63.0	63.0	63.0		48.5	48.5		48.5	48.5	
Yellow Time (s)	4.6	4.6	4.6	4.6	4.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.2	2.2	2.2	2.2	2.2		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.8	6.8	6.8	6.8	6.8		5.7	5.7		5.7	5.7	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	None		None	None	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	20.0	20.0	20.0	20.0	20.0		32.0	32.0		32.0	32.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	24.7	24.7	24.7	24.7	24.7		10.5	10.5		10.5	10.5	
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.68		0.29	0.29		0.29	0.29	
v/c Ratio	0.02	0.17	0.01	0.03	0.22		0.06	0.16		0.03	0.11	
Control Delay (s/veh)	6.4	5.3	1.7	6.4	5.4		13.2	10.6		12.9	9.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	6.4	5.3	1.7	6.4	5.4		13.2	10.6		12.9	9.2	
LOS	A	A	A	A	A		B	B		B	A	
Approach Delay (s/veh)		5.2			5.4			11.2			10.0	
Approach LOS		A			A			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 124
Actuated Cycle Length: 36.2
Natural Cycle: 80
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.22
Intersection Signal Delay (s/veh): 6.0 Intersection LOS: A
Intersection Capacity Utilization 57.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	11	591	9	18	773	26	84	15	57
v/c Ratio	0.02	0.17	0.01	0.03	0.22	0.06	0.16	0.03	0.11
Control Delay (s/veh)	6.4	5.3	1.7	6.4	5.4	13.2	10.6	12.9	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.4	5.3	1.7	6.4	5.4	13.2	10.6	12.9	9.2
Queue Length 50th (m)	0.4	8.7	0.0	0.7	11.7	1.5	3.4	0.8	1.7
Queue Length 95th (m)	2.1	13.5	1.1	2.8	17.5	5.5	10.9	3.9	7.8
Internal Link Dist (m)		1337.0			1384.0		3067.5		3060.0
Turn Bay Length (m)	35.0		40.0	45.0		40.0		30.0	
Base Capacity (vph)	667	5092	1328	803	5129	1506	1792	1506	1743
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.12	0.01	0.02	0.15	0.02	0.05	0.01	0.03

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	585	9	18	747	18	26	53	30	15	29	28
Future Volume (vph)	11	585	9	18	747	18	26	53	30	15	29	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.8	6.8	6.8	6.8	6.8		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	5092	1328	1825	5126		1825	1793		1825	1744	
Flt Permitted	0.35	1.00	1.00	0.42	1.00		0.78	1.00		0.78	1.00	
Satd. Flow (perm)	667	5092	1328	803	5126		1507	1793		1507	1744	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	11	591	9	18	755	18	26	54	30	15	29	28
RTOR Reduction (vph)	0	0	4	0	2	0	0	23	0	0	24	0
Lane Group Flow (vph)	11	591	5	18	771	0	26	61	0	15	33	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)	21.0	21.0	21.0	21.0	21.0		5.1	5.1		5.1	5.1	
Effective Green, g (s)	21.0	21.0	21.0	21.0	21.0		5.1	5.1		5.1	5.1	
Actuated g/C Ratio	0.54	0.54	0.54	0.54	0.54		0.13	0.13		0.13	0.13	
Clearance Time (s)	6.8	6.8	6.8	6.8	6.8		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	362	2770	722	436	2788		199	236		199	230	
v/s Ratio Prot		0.12			c0.15			c0.03			0.02	
v/s Ratio Perm	0.02		0.00	0.02			0.02			0.01		
v/c Ratio	0.03	0.21	0.01	0.04	0.28		0.13	0.26		0.08	0.14	
Uniform Delay, d1	4.1	4.5	4.0	4.1	4.7		14.8	15.1		14.7	14.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0	0.0	0.0	0.1		0.3	0.6		0.2	0.3	
Delay (s)	4.1	4.6	4.0	4.1	4.8		15.1	15.6		14.8	15.1	
Level of Service	A	A	A	A	A		B	B		B	B	
Approach Delay (s/veh)		4.6			4.8			15.5			15.0	
Approach LOS		A			A			B			B	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	5.9	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.27			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	178	29	174	279	194	164	1167	207	143	809	39
Future Volume (vph)	25	178	29	174	279	194	164	1167	207	143	809	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	45.0		0.0	110.0		0.0	90.0		0.0	90.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	100.0			100.0			100.0			100.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.979			0.939			0.977			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	1839	0	1807	1772	0	1825	3472	0	1789	3455	0
Flt Permitted	0.222			0.354			0.227			0.058		
Satd. Flow (perm)	410	1839	0	673	1772	0	436	3472	0	109	3455	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			29			18			4	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1436.5			913.5			3112.8	
Travel Time (s)		79.0			86.2			54.8			186.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	26	187	31	183	294	204	173	1228	218	151	852	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	218	0	183	498	0	173	1446	0	151	893	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		7.0	25.0		7.0	25.0	
Minimum Split (s)	16.2	16.2		11.0	24.2		11.0	31.6		11.0	31.6	
Total Split (s)	42.0	42.0		16.0	58.0		19.0	63.0		19.0	63.0	
Total Split (%)	30.0%	30.0%		11.4%	41.4%		13.6%	45.0%		13.6%	45.0%	
Maximum Green (s)	35.8	35.8		12.0	51.8		15.0	56.4		15.0	56.4	
Yellow Time (s)	4.2	4.2		3.0	4.2		3.0	4.6		3.0	4.6	
All-Red Time (s)	2.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	
Total Lost Time (s)	5.2	4.2		3.0	4.2		3.0	4.6		3.0	4.6	
Lead/Lag	Lag	Lag		Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	5.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Act Effct Green (s)	29.3	30.3		47.3	46.1		82.9	69.1		84.4	69.8	
Actuated g/C Ratio	0.21	0.22		0.34	0.33		0.59	0.49		0.60	0.50	
v/c Ratio	0.31	0.54		0.55	0.83		0.46	0.84		0.68	0.52	
Control Delay (s/veh)	53.9	51.4		39.5	52.3		16.6	37.3		44.8	26.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	53.9	51.4		39.5	52.3		16.6	37.3		44.8	26.6	
LOS	D	D		D	D		B	D		D	C	
Approach Delay (s/veh)		51.7			48.9			35.1			29.2	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 19 (14%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 37.1		Intersection LOS: D	
Intersection Capacity Utilization 96.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: Trafalgar Road & Lower Baseline

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	26	218	183	498	173	1446	151	893
v/c Ratio	0.31	0.54	0.55	0.83	0.46	0.84	0.68	0.52
Control Delay (s/veh)	53.9	51.4	39.5	52.3	16.6	37.3	44.8	26.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.9	51.4	39.5	52.3	16.6	37.3	44.8	26.6
Queue Length 50th (m)	6.3	52.8	36.9	119.6	19.7	186.0	24.7	90.7
Queue Length 95th (m)	15.5	74.5	52.5	153.0	34.4	#264.4	50.4	127.4
Internal Link Dist (m)		1293.1		1412.5		889.5		3088.8
Turn Bay Length (m)	45.0		110.0		90.0		90.0	
Base Capacity (vph)	107	500	332	698	424	1721	259	1724
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.44	0.55	0.71	0.41	0.84	0.58	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	178	29	174	279	194	164	1167	207	143	809	39
Future Volume (vph)	25	178	29	174	279	194	164	1167	207	143	809	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	4.2		3.0	4.2		3.0	4.6		3.0	4.6	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.98		1.00	0.94		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1755	1838		1807	1771		1825	3474		1789	3455	
Flt Permitted	0.22	1.00		0.35	1.00		0.23	1.00		0.06	1.00	
Satd. Flow (perm)	410	1838		673	1771		436	3474		110	3455	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	187	31	183	294	204	173	1228	218	151	852	41
RTOR Reduction (vph)	0	5	0	0	19	0	0	9	0	0	2	0
Lane Group Flow (vph)	26	213	0	183	479	0	173	1437	0	151	891	0
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	Perm	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.3	28.3		44.2	44.2		78.3	67.0		79.7	67.7	
Effective Green, g (s)	29.3	30.3		45.2	46.2		80.3	69.0		81.7	69.7	
Actuated g/C Ratio	0.21	0.22		0.32	0.33		0.57	0.49		0.58	0.50	
Clearance Time (s)	6.2	6.2		4.0	6.2		4.0	6.6		4.0	6.6	
Vehicle Extension (s)	5.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Lane Grp Cap (vph)	85	397		321	584		372	1712		220	1720	
v/s Ratio Prot		0.12		0.05	c0.27		0.04	c0.41		c0.06	0.26	
v/s Ratio Perm	0.06			0.13			0.23			0.34		
v/c Ratio	0.31	0.54		0.57	0.82		0.47	0.84		0.69	0.52	
Uniform Delay, d1	46.8	48.6		36.5	43.1		16.0	30.7		35.1	23.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.2	2.5		2.4	9.9		0.9	5.1		8.6	1.1	
Delay (s)	51.0	51.2		39.0	52.9		16.9	35.8		43.7	24.9	
Level of Service	D	D		D	D		B	D		D	C	
Approach Delay (s/veh)		51.2			49.2			33.8			27.6	
Approach LOS		D			D			C			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	14.8
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

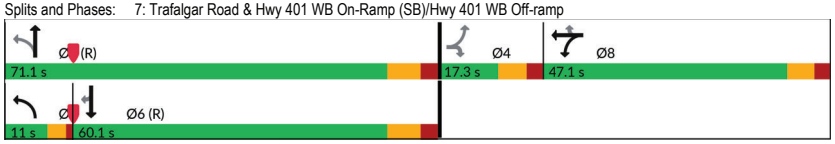
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	14	568	27	1396	5	791	0	0	656	45
Future Volume (vph)	17	0	14	568	27	1396	5	791	0	0	656	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	3411	0	0	3444	1306
Flt Permitted	0.588			0.950			0.179					
Satd. Flow (perm)	1130	0	1633	3372	1921	2737	344	3411	0	0	3444	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			353						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			465.4			196.9			254.2	
Travel Time (s)		69.9			27.9			11.8			13.1	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	5%	0%	5%	0%	7%	0%	0%	6%	25%
Adj. Flow (vph)	18	0	15	604	29	1485	5	841	0	0	698	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	0	15	604	29	1485	5	841	0	0	698	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.8		10.8	64.9	64.9	64.9	48.3	44.2			42.0	42.0
Actuated g/C Ratio	0.08		0.08	0.48	0.48	0.48	0.36	0.33			0.31	0.31
v/c Ratio	0.20		0.06	0.37	0.03	0.99	0.03	0.76			0.65	0.10
Control Delay (s/veh)	63.2		0.4	26.2	25.4	49.3	24.8	45.1			43.5	0.4
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.2		0.4	26.2	25.4	49.3	24.8	45.1			43.5	0.4
LOS	E		A	C	C	D	C	D			D	A
Approach Delay (s/veh)		34.7			42.4			45.0			40.7	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 42.6		Intersection LOS: D	
Intersection Capacity Utilization 90.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	18	15	604	29	1485	5	841	698	48
v/c Ratio	0.20	0.06	0.37	0.03	0.99	0.03	0.76	0.65	0.10
Control Delay (s/veh)	63.2	0.4	26.2	25.4	49.3	24.8	45.1	43.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.2	0.4	26.2	25.4	49.3	24.8	45.1	43.5	0.4
Queue Length 50th (m)	4.6	0.0	58.1	4.3	~224.1	0.9	112.9	87.8	0.0
Queue Length 95th (m)	12.6	0.0	88.9	12.5	#309.0	3.4	121.1	109.9	0.0
Internal Link Dist (m)				441.4			172.9	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	89	249	1616	920	1495	199	1585	1321	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.06	0.37	0.03	0.99	0.03	0.53	0.53	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	14	568	27	1396	5	791	0	0	656	45
Future Volume (vph)	17	0	14	568	27	1396	5	791	0	0	656	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	0.95			0.95	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	3411			3444	1306
Flt Permitted	0.59		1.00	0.95	1.00	1.00	0.18	1.00			1.00	1.00
Satd. Flow (perm)	1130		1633	3372	1921	2737	343	3411			3444	1306
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	18	0	15	604	29	1485	5	841	0	0	698	48
RTOR Reduction (vph)	0	0	14	0	0	184	0	0	0	0	0	35
Lane Group Flow (vph)	18	0	1	604	29	1301	5	841	0	0	698	13
Heavy Vehicles (%)	0%	0%	0%	5%	0%	5%	0%	7%	0%	0%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.8		6.8	64.9	64.9	64.9	41.3	41.3			35.9	35.9
Effective Green, g (s)	6.8		6.8	64.9	64.9	64.9	41.3	41.3			35.9	35.9
Actuated g/C Ratio	0.05		0.05	0.48	0.48	0.48	0.30	0.30			0.26	0.26
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		81	1615	920	1310	119	1039			912	346
v/s Ratio Prot				0.18	0.02		0.00	c0.25			0.20	
v/s Ratio Perm	c0.02		0.00			c0.48	0.01					0.01
v/c Ratio	0.32		0.01	0.37	0.03	0.99	0.04	0.81			0.77	0.04
Uniform Delay, d1	62.1		61.1	22.4	18.7	35.1	34.5	43.5			45.9	37.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.3		0.0	0.1	0.0	23.1	0.1	6.8			6.1	0.2
Delay (s)	65.4		61.2	22.5	18.7	58.2	34.6	50.3			52.0	37.2
Level of Service	E		E	C	B	E	C	D			D	D
Approach Delay (s/veh)		63.5			47.4			50.2			51.0	
Approach LOS		E			D			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	48.9	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	0.92				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)		26.5	
Intersection Capacity Utilization	90.0%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					

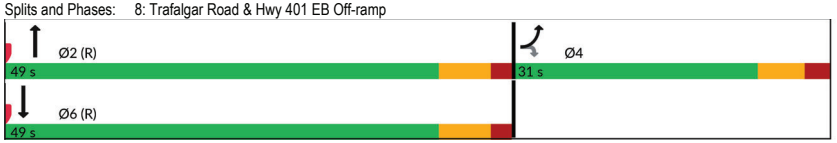
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	302	0	810	838	0
Future Volume (vph)	147	302	0	810	838	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	0.95	0.95	1.00
Frt	0.924	0.850				
Flt Protected	0.976					
Satd. Flow (prot)	2949	1327	0	3411	3444	0
Flt Permitted	0.976					
Satd. Flow (perm)	2949	1327	0	3411	3444	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	107	107				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	202.7	
Travel Time (s)	31.9			4.6	10.4	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	16%	12%	0%	7%	6%	0%
Adj. Flow (vph)	162	332	0	890	921	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	328	166	0	890	921	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	12.2	12.2		53.8	53.8	
Actuated g/C Ratio	0.15	0.15		0.67	0.67	
v/c Ratio	0.61	0.57		0.39	0.40	
Control Delay (s/veh)	25.7	20.2		6.8	6.8	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	25.7	20.2		6.8	6.8	
LOS	C	C		A	A	
Approach Delay (s/veh)	23.8			6.8	6.8	
Approach LOS	C			A	A	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay (s/veh): 10.4 Intersection LOS: B
Intersection Capacity Utilization 47.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	328	166	890	921
v/c Ratio	0.61	0.57	0.39	0.40
Control Delay (s/veh)	25.7	20.2	6.8	6.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.7	20.2	6.8	6.8
Queue Length 50th (m)	18.3	9.7	27.6	28.5
Queue Length 95th (m)	30.1	29.4	46.4	47.8
Internal Link Dist (m)	507.7		52.4	178.7
Turn Bay Length (m)		125.0		
Base Capacity (vph)	959	473	2291	2314
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.35	0.39	0.40

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	302	0	810	838	0
Future Volume (vph)	147	302	0	810	838	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		0.95	0.95	
Frt	0.92	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2949	1327		3411	3444	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2949	1327		3411	3444	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	162	332	0	890	921	0
RTOR Reduction (vph)	91	91	0	0	0	0
Lane Group Flow (vph)	237	75	0	890	921	0
Heavy Vehicles (%)	16%	12%	0%	7%	6%	0%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	12.2	12.2		53.8	53.8	
Effective Green, g (s)	12.2	12.2		53.8	53.8	
Actuated g/C Ratio	0.15	0.15		0.67	0.67	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	449	202		2293	2316	
v/s Ratio Prot	c0.08			0.26	c0.27	
v/s Ratio Perm		0.06				
v/c Ratio	0.53	0.37		0.39	0.40	
Uniform Delay, d1	31.2	30.5		5.8	5.9	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	1.2		0.5	0.5	
Delay (s)	32.4	31.6		6.3	6.4	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	32.1			6.3	6.4	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	11.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	47.3%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Appendix C Background Growth Calculation

TABLE 1: Annual Growth Rates provided by the Region through Terms of Refernce

Corridor Segment	Growth Rates		
	Existing to 2031	2031 to 2041	2041 to 2051
Trafalgar Rd between Derry Rd and Highway 401	3.0%	1.0%	1.0%
Trafalgar Rd south of Britannia Rd	7.0%	1.0%	2.0%
Trafalgar Rd between Derry Rd and Britannia Rd	7.0%	1.0%	2.0%
Derry Rd west of Trafalgar Rd	5.0%	3.0%	1.0%
Derry Rd east of Trafalgar Rd	5.0%	2.0%	1.0%
Britannia Rd west of Trafalgar Rd	5.0%	3.0%	1.0%
Britannia Rd east of Trafalgar Rd	5.0%	2.0%	1.0%

NOTE: The Region's screenline forecasts did not directly account for the corridor segment of Trafalgar Road between Derry Road and Britannia Road. The Region recommended that the Trafalgar Road growth rates south of Britannia Road be also be applied between Dery Road and Britannia Road.

TABLE 2: Region TOR Annual Growth Rates vs. TYLin EMME-based Annual Growth Rates with and without Agerton Trips

Corridor Segment	Growth Rates											
	TOR			Received OD matrices with Agerton Trips			Received OD matrices without Agerton Trips			Difference with and without Agerton Trips		
	Existing to 2031	2031 to 2041	2041 to 2051	Existing to 2031	2031 to 2041	2041 to 2051	Existing to 2031	2031 to 2041	2041 to 2051	Existing to 2031	2031 to 2041	2041 to 2051
Trafalgar Rd between Derry Rd and Highway 401	3.0%	1.0%	1.0%	5.3%	-0.6%	2.0%	3.4%	-1.4%	1.4%	1.8%	0.8%	0.6%
Trafalgar Rd south of Britannia Rd	7.0%	1.0%	2.0%	-	-	-	-	-	-	-	-	-
Trafalgar Rd between Derry Rd and Britannia Rd	7.0%	1.0%	2.0%	6.9%	0.9%	1.3%	6.0%	0.6%	1.3%	0.8%	0.3%	0.0%
Derry Rd west of Trafalgar Rd	5.0%	3.0%	1.0%	4.5%	3.4%	1.4%	3.1%	2.8%	0.7%	1.3%	0.6%	0.8%
Derry Rd east of Trafalgar Rd	5.0%	2.0%	1.0%	4.2%	2.8%	1.7%	3.0%	2.0%	1.2%	1.2%	0.7%	0.5%
Britannia Rd west of Trafalgar Rd	5.0%	3.0%	1.0%	-	-	-	-	-	-	-	-	-
Britannia Rd east of Trafalgar Rd	5.0%	2.0%	1.0%	-	-	-	-	-	-	-	-	-

NOTE: The EMME model / road network received by TYLin did not include enough information (Britannia Road) to derive growth rates for the following Corridor Segments:

- Trafalgar Road south of Britannia Road
- Britannia Road west of Trafalgar Road
- Britannia Road east of Trafalgar Road

TABLE 3: Modified Region TOR Annual Growth Rates to remove Agerton site traffic from background

Corridor Segment	Growth Rates					
	TOR			TOR Modifications: Without Agerton Traffic		
	Existing to 2031	2031 to 2041	2041 to 2051	Existing to 2031	2031 to 2041	2041 to 2051
Trafalgar Rd between Derry Rd and Highway 401	3.0%	1.0%	1.0%	1.2%	0.2%	0.4%
Trafalgar Rd south of Britannia Rd	7.0%	1.0%	2.0%	7.0%	1.0%	2.0%
Trafalgar Rd between Derry Rd and Britannia Rd	7.0%	1.0%	2.0%	6.2%	0.7%	2.0%
Derry Rd west of Trafalgar Rd	5.0%	3.0%	1.0%	3.7%	2.4%	0.2%
Derry Rd east of Trafalgar Rd	5.0%	2.0%	1.0%	3.8%	1.3%	0.5%
Britannia Rd west of Trafalgar Rd	5.0%	3.0%	1.0%	5.0%	3.0%	1.0%
Britannia Rd east of Trafalgar Rd	5.0%	2.0%	1.0%	5.0%	2.0%	1.0%

NOTE: The EMME model / road network received by TYLin did not include enough information (Britannia Road) to derive growth rates for the following Corridor Segments:
- Trafalgar Road south of Britannia Road
- Britannia Road west of Trafalgar Road
- Britannia Road east of Trafalgar Road

The growth rates originally provided by the Region were applied to the "TOR Modifications: Without Agerton Traffic"

TABLE 4: Final Annual Growth Rates Applied to Region Corridor Segments:

Corridor Segment	Growth Rates		
	Existing to 2031	2031 to 2041	2041 to 2051
Trafalgar Rd between Derry Rd and Highway 401	1.2%	0.2%	0.4%
Trafalgar Rd south of Britannia Rd	6.2%	0.7%	2.0%
Trafalgar Rd between Derry Rd and Britannia Rd	6.2%	0.7%	2.0%
Derry Rd west of Trafalgar Rd	3.7%	2.4%	0.2%
Derry Rd east of Trafalgar Rd	3.8%	1.3%	0.5%
Britannia Rd west of Trafalgar Rd	4.35%	2.7%	0.6%
Britannia Rd east of Trafalgar Rd	4.4%	1.65%	0.75%

NOTE: Due to their similar location and current/future development contexts, the growth rates calculated for the segment of Traflagar Road between Derry Road and Britannia Road were also applied to the segment of Trafalgar Road south of Britannia Road

NOTE: It was assumed that Britannia Road and Derry Road would experience similar changes to their growth rates without Agerton background traffic, given that they are adjacent east-west Regional corridors. It was also determined that the change in growth expected on Derry Road would not be applied directly to Britannia Road, due to its relative proximity to Agerton compared to Derry Road. In order to better reflect growth on Britannia Road without Agerton traffic, the difference in growth rates between Derry Road and Britannia Road in Table 3 were calculated, and then half of the difference was applied to the Britannia Road rate. For example, in 2031:

Derry Road west of Trafalgar Road: 3.7%

Britannia Road west of Trafalgar: 5.0%

Diffference: 1.3%

Modification applied to Britannia Road west of Trafalgar in Table 4: 5.0% - (1.3% * 0.5) = 4.35%

TABLE 5: Annual Growth Rates for Town Road Segments

Road Segment	Growth Rates		
	Existing to 2031	2031 to 2041	2041 to 2051
Eighth Line south of Derry Rd	2.65%	1.5%	1.0%
Eighth Line north of Derry Rd	2.65%	1.5%	1.0%
Lower Base Line west of Trafalgar Rd	2.65%	1.5%	1.0%
Lower Base Line east of Trafalgar Rd	2.65%	1.5%	1.0%

As growth rates for Town Roads were not directly supplied through the TOR process, TYLin utilized data and methodologies applied in the Aguust 2025 MP4 Trafalgar RNA report.

To grow existing traffic to the 2031 horizon year, a growth rate of 2.65% was applied, as originally applied in Scenario A of the 2022 Trafalgar and Agerton TMP Addendum.

The 2031 to 2041 and 2041 to 2051 annual growth rates in Table 5 were provided to TYLin by Town Staff for the Trafalgar RNA. It is TYLin's understanding that the Town's growth rates did not account for the Agerton and Trafalgar Secondary Plan areas as background traffic. In the RNA, the Town's growth rates were increased to account for background traffic through the use of the Region's growth rates.

For example, The Region's growth rate for Trafalgar Road between Derry Road and Britannia Road was added to the Town's Eighth Line, south of Derry Road growth rate.

The resultant calculations for the pruposes of the enclosed Agerton TMP Update are summarized in Table 6 (Table 4 ad Table 5 values added together, as applicable).

TABLE 6: Final Annual Growth Rates Applied to Town Road Segments

Road Segment	Growth Rates		
	Existing to 2031	2031 to 2041	2041 to 2051
Eighth Line south of Derry Rd	2.65%	2.2%	3.0%
Eighth Line north of Derry Rd	2.65%	1.7%	1.4%
Lower Base Line west of Trafalgar Rd	2.65%	4.2%	1.6%
Lower Base Line east of Trafalgar Rd	2.65%	3.15%	1.75%

NOTE: The annual growth percentages in Table 4 and Table 6 of this appendix combine to create the summary background growth rate table in the main report body.

Appendix D Future Background SYNCHRO Capacity and Queuing Analysis Reports

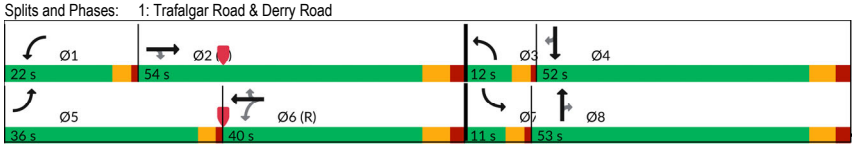
2031 Future Background

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	702	1315	264	246	477	109	131	827	183	77	737	60
Future Volume (vph)	702	1315	264	246	477	109	131	827	183	77	737	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3437	4520	1570	1825	4433	1633	3054	4137	1597	3268	3991	923
Flt Permitted	0.950			0.104			0.950			0.950		
Satd. Flow (perm)	3437	4520	1570	200	4433	1633	3054	4137	1597	3268	3991	923
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			123			187			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	3%	2%	4%	0%	4%	0%	7%	9%	0%	0%	13%	73%
Adj. Flow (vph)	716	1342	269	251	487	111	134	844	187	79	752	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	716	1342	269	251	487	111	134	844	187	79	752	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	36.0	54.0	54.0	22.0	40.0	40.0	12.0	53.0	53.0	11.0	52.0	52.0
Total Split (%)	25.7%	38.6%	38.6%	15.7%	28.6%	28.6%	8.6%	37.9%	37.9%	7.9%	37.1%	37.1%
Maximum Green (s)	32.0	47.1	47.1	18.0	33.1	33.1	8.0	46.2	46.2	7.0	45.2	45.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	34.9	54.3	54.3	61.7	39.6	39.6	9.5	41.6	41.6	8.3	40.4	40.4
Actuated g/C Ratio	0.25	0.39	0.39	0.44	0.28	0.28	0.07	0.30	0.30	0.06	0.29	0.29
v/c Ratio	0.84	0.77	0.37	0.78	0.39	0.20	0.65	0.69	0.31	0.41	0.65	0.17
Control Delay (s/veh)	76.5	33.9	10.8	56.6	40.2	6.7	97.4	48.7	10.9	68.9	44.6	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.5	33.9	10.8	56.6	40.2	6.7	97.4	48.7	10.9	68.9	44.6	4.4
LOS	E	C	B	E	D	A	F	D	B	E	D	A
Approach Delay (s/veh)		44.3			40.7			48.2			44.0	
Approach LOS		D			D			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBTL, Start of Green		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay (s/veh): 44.5		Intersection LOS: D
Intersection Capacity Utilization 76.3%		ICU Level of Service D
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	716	1342	269	251	487	111	134	844	187	79	752	61
v/c Ratio	0.84	0.77	0.37	0.78	0.39	0.20	0.65	0.69	0.31	0.41	0.65	0.17
Control Delay (s/veh)	76.5	33.9	10.8	56.6	40.2	6.7	97.4	48.7	10.9	68.9	44.6	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	76.5	33.9	10.8	56.6	40.2	6.7	97.4	48.7	10.9	68.9	44.6	4.4
Queue Length 50th (m)	96.0	96.7	15.1	55.2	53.5	3.9	19.8	110.4	8.0	11.1	83.5	0.0
Queue Length 95th (m)	m108.2	143.4	m24.2	#94.0	56.1	6.6	#35.7	56.5	16.1	19.7	95.5	1.7
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	863	1752	720	328	1254	549	206	1424	672	192	1345	393
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.77	0.37	0.77	0.39	0.20	0.65	0.59	0.28	0.41	0.56	0.16

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	702	1315	264	246	477	109	131	827	183	77	737	60
Future Volume (vph)	702	1315	264	246	477	109	131	827	183	77	737	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3437	4520	1570	1825	4433	1633	3054	4137	1597	3268	3991	923
Flt Permitted	0.95	1.00	1.00	0.10	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3437	4520	1570	200	4433	1633	3054	4137	1597	3268	3991	923
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	716	1342	269	251	487	111	134	844	187	79	752	61
RTOR Reduction (vph)	0	0	112	0	0	80	0	0	131	0	0	43
Lane Group Flow (vph)	716	1342	157	251	487	31	134	844	56	79	752	18
Heavy Vehicles (%)	3%	2%	4%	0%	4%	0%	7%	9%	0%	0%	13%	73%
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Actuated Green, G (s)	33.9	52.2	52.2	56.7	37.5	37.5	8.5	39.6	39.6	7.3	38.4	38.4
Effective Green, g (s)	34.9	54.2	54.2	58.7	39.5	39.5	9.5	41.6	41.6	8.3	40.4	40.4
Actuated g/C Ratio	0.25	0.39	0.39	0.42	0.28	0.28	0.07	0.30	0.30	0.06	0.29	0.29
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	856	1749	607	318	1250	460	207	1229	474	193	1151	266
v/s Ratio Prot	c0.21	c0.30		0.11	0.11		c0.04	c0.20		0.02	0.19	
v/s Ratio Perm			0.10	0.22		0.02			0.03			0.02
v/c Ratio	0.84	0.77	0.26	0.79	0.39	0.07	0.65	0.69	0.12	0.41	0.65	0.07
Uniform Delay, d1	49.8	37.4	29.2	35.9	40.5	36.8	63.6	43.4	35.8	63.5	43.7	36.1
Progression Factor	1.46	0.84	0.93	1.11	0.94	1.12	1.31	1.06	2.24	0.98	0.97	1.00
Incremental Delay, d2	3.4	1.4	0.4	13.5	0.9	0.3	8.6	2.0	0.2	2.9	1.8	0.2
Delay (s)	76.2	32.8	27.7	53.3	39.1	41.4	91.7	48.1	80.6	65.0	44.0	36.3
Level of Service	E	C	C	D	D	D	F	D	F	E	D	D
Approach Delay (s/veh)		45.6			43.6			58.3			45.3	
Approach LOS		D			D			E			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	48.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.77			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	76.3%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

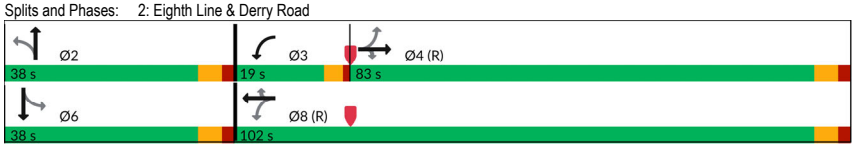
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1484	78	78	827	7	18	0	47	3	0	9
Future Volume (vph)	16	1484	78	78	827	7	18	0	47	3	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1825	4520	1633	1825	1633	0	1825	1633	0
Flt Permitted	0.280			0.105			0.752			0.725		
Satd. Flow (perm)	527	4520	1601	202	4520	1633	1445	1633	0	1393	1633	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			73			23		198			211	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	0%	2%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	17	1546	81	81	861	7	19	0	49	3	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	1546	81	81	861	7	19	49	0	3	9	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	

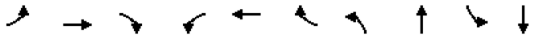
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		36.0	36.0	
Total Split (s)	83.0	83.0	83.0	19.0	102.0	102.0	38.0	38.0		38.0	38.0	
Total Split (%)	59.3%	59.3%	59.3%	13.6%	72.9%	72.9%	27.1%	27.1%		27.1%	27.1%	
Maximum Green (s)	77.0	77.0	77.0	15.0	96.0	96.0	32.0	32.0		32.0	32.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0		0	0	
Act Effct Green (s)	109.0	109.0	109.0	123.2	122.4	122.4	10.0	10.0		10.0	10.0	
Actuated g/C Ratio	0.78	0.78	0.78	0.88	0.87	0.87	0.07	0.07		0.07	0.07	
v/c Ratio	0.04	0.44	0.06	0.30	0.22	0.00	0.18	0.16		0.03	0.03	
Control Delay (s/veh)	2.7	12.3	2.0	4.2	2.0	0.0	53.9	5.9		61.3	0.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	2.7	12.3	2.0	4.2	2.0	0.0	53.9	5.9		61.3	0.2	
LOS	A	B	A	A	A	A	D	A		E	A	
Approach Delay (s/veh)		11.7			2.1			19.3			15.5	
Approach LOS		B			A			B			B	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 85		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.44		
Intersection Signal Delay (s/veh): 8.5		Intersection LOS: A
Intersection Capacity Utilization 56.7%		ICU Level of Service B
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road

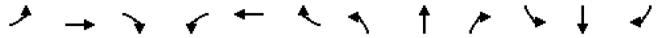




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	17	1546	81	81	861	7	19	49	3	9
v/c Ratio	0.04	0.44	0.06	0.30	0.22	0.00	0.18	0.16	0.03	0.03
Control Delay (s/veh)	2.7	12.3	2.0	4.2	2.0	0.0	53.9	5.9	61.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	2.7	12.3	2.0	4.2	2.0	0.0	53.9	5.9	61.3	0.2
Queue Length 50th (m)	1.8	177.4	5.5	2.5	15.2	0.0	5.4	0.0	0.8	0.0
Queue Length 95th (m)	m0.1	1.9	m0.0	4.5	18.2	0.1	14.2	1.8	4.0	0.0
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	410	3519	1262	352	3951	1431	330	526	318	536
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.44	0.06	0.23	0.22	0.00	0.06	0.09	0.01	0.02

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	1484	78	78	827	7	18	0	47	3	0	9
Future Volume (vph)	16	1484	78	78	827	7	18	0	47	3	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	4520	1601	1825	4520	1633	1825	1633		1825	1633	
Flt Permitted	0.28	1.00	1.00	0.11	1.00	1.00	0.75	1.00		0.73	1.00	
Satd. Flow (perm)	528	4520	1601	203	4520	1633	1444	1633		1393	1633	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	17	1546	81	81	861	7	19	0	49	3	0	9
RTOR Reduction (vph)	0	0	17	0	0	1	0	46	0	0	8	0
Lane Group Flow (vph)	17	1546	64	81	861	6	19	3	0	3	1	0
Heavy Vehicles (%)	2%	2%	2%	0%	2%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	107.8	107.8	107.8	120.0	120.0	120.0	8.0	8.0		8.0	8.0	
Effective Green, g (s)	107.8	107.8	107.8	120.0	120.0	120.0	8.0	8.0		8.0	8.0	
Actuated g/C Ratio	0.77	0.77	0.77	0.86	0.86	0.86	0.06	0.06		0.06	0.06	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	406	3480	1232	269	3874	1399	82	93		79	93	
v/s Ratio Prot		c0.34		c0.02	0.19			0.00			0.00	
v/s Ratio Perm	0.03		0.04	0.24		0.00	c0.01			0.00		
v/c Ratio	0.04	0.44	0.05	0.30	0.22	0.00	0.23	0.03		0.04	0.01	
Uniform Delay, d1	3.8	5.6	3.9	2.9	1.8	1.4	63.1	62.3		62.4	62.2	
Progression Factor	0.52	2.02	1.45	1.00	1.00	1.00	0.81	1.00		1.00	1.00	
Incremental Delay, d2	0.2	0.3	0.1	0.6	0.1	0.0	1.4	0.1		0.2	0.0	
Delay (s)	2.1	11.7	5.7	3.5	1.9	1.4	52.5	62.5		62.6	62.3	
Level of Service	A	B	A	A	A	A	D	E		E	E	
Approach Delay (s/veh)		11.3			2.0			59.7			62.3	
Approach LOS		B			A			E			E	

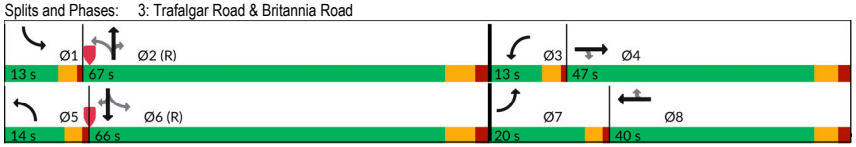
Intersection Summary				
HCM 2000 Control Delay (s/veh)	9.5	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	56.7%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	711	363	180	322	81	181	926	223	46	1375	94
Future Volume (vph)	154	711	363	180	322	81	181	926	223	46	1375	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3309	4520	1601	3541	4391	1633	1636	4254	1597	1652	4254	1597
Flt Permitted	0.950			0.950			0.074			0.245		
Satd. Flow (perm)	3309	4520	1601	3541	4391	1633	127	4254	1597	426	4254	1597
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			125			225			117
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	7%	2%	2%	0%	5%	0%	3%	6%	0%	2%	6%	0%
Adj. Flow (vph)	156	718	367	182	325	82	183	935	225	46	1389	95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	718	367	182	325	82	183	935	225	46	1389	95
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	20.0	47.0	47.0	13.0	40.0	40.0	14.0	67.0	67.0	13.0	66.0	66.0
Total Split (%)	14.3%	33.6%	33.6%	9.3%	28.6%	28.6%	10.0%	47.9%	47.9%	9.3%	47.1%	47.1%
Maximum Green (s)	16.0	41.0	41.0	9.0	34.0	34.0	10.0	60.0	60.0	9.0	59.0	59.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	12.9	33.0	33.0	10.0	30.0	30.0	86.6	75.7	75.7	75.3	64.8	64.8
Actuated g/C Ratio	0.09	0.24	0.24	0.07	0.21	0.21	0.62	0.54	0.54	0.54	0.46	0.46
v/c Ratio	0.51	0.67	0.76	0.72	0.35	0.18	0.69	0.41	0.23	0.15	0.71	0.12
Control Delay (s/veh)	66.1	51.4	39.7	72.1	44.6	16.1	57.1	31.4	13.5	9.7	32.5	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.1	51.4	39.7	72.1	44.6	16.1	57.1	31.4	13.5	9.7	32.5	4.4
LOS	E	D	D	E	D	B	E	C	B	A	C	A
Approach Delay (s/veh)		49.8			49.1			31.9			30.0	
Approach LOS		D			D			C			C	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.76		
Intersection Signal Delay (s/veh): 38.2	Intersection LOS: D	
Intersection Capacity Utilization 70.3%	ICU Level of Service C	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	156	718	367	182	325	82	183	935	225	46	1389	95
v/c Ratio	0.51	0.67	0.76	0.72	0.35	0.18	0.69	0.41	0.23	0.15	0.71	0.12
Control Delay (s/veh)	66.1	51.4	39.7	72.1	44.6	16.1	57.1	31.4	13.5	9.7	32.5	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.1	51.4	39.7	72.1	44.6	16.1	57.1	31.4	13.5	9.7	32.5	4.4
Queue Length 50th (m)	22.7	78.3	62.0	26.0	34.7	2.3	46.9	74.9	13.3	2.9	167.5	6.3
Queue Length 95th (m)	34.0	84.9	89.5	#41.9	47.4	17.3	#86.0	96.2	31.8	m8.0	173.5	m12.9
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	401	1388	590	252	1133	514	264	2299	966	321	1968	802
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.52	0.62	0.72	0.29	0.16	0.69	0.41	0.23	0.14	0.71	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	154	711	363	180	322	81	181	926	223	46	1375	94
Future Volume (vph)	154	711	363	180	322	81	181	926	223	46	1375	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3309	4520	1601	3541	4391	1633	1636	4254	1597	1652	4254	1597
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.07	1.00	1.00	0.25	1.00	1.00
Satd. Flow (perm)	3309	4520	1601	3541	4391	1633	127	4254	1597	426	4254	1597
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	156	718	367	182	325	82	183	935	225	46	1389	95
RTOR Reduction (vph)	0	0	109	0	0	64	0	0	105	0	0	51
Lane Group Flow (vph)	156	718	258	182	325	18	183	935	120	46	1389	44
Heavy Vehicles (%)	7%	2%	2%	0%	5%	0%	3%	6%	0%	2%	6%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Actuated Green, G (s)	11.9	31.0	31.0	9.0	28.1	28.1	83.0	72.9	72.9	68.9	62.8	62.8
Effective Green, g (s)	12.9	33.0	33.0	10.0	30.1	30.1	84.0	74.9	74.9	70.9	64.8	64.8
Actuated g/C Ratio	0.09	0.24	0.24	0.07	0.22	0.22	0.60	0.54	0.54	0.51	0.46	0.46
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	304	1065	377	252	944	351	261	2275	854	277	1968	739
v/s Ratio Prot	0.05	0.16		c0.05	0.07		c0.09	0.22		0.01	0.33	
v/s Ratio Perm			c0.16			0.01	c0.33		0.08	0.08		0.03
v/c Ratio	0.51	0.67	0.69	0.72	0.34	0.05	0.70	0.41	0.14	0.17	0.71	0.06
Uniform Delay, d1	60.6	48.6	48.8	63.6	46.6	43.6	32.4	19.4	16.4	17.6	30.0	20.8
Progression Factor	1.00	1.00	1.00	0.87	0.95	10.10	1.77	1.50	4.89	0.69	0.99	1.90
Incremental Delay, d2	1.5	1.7	5.1	9.7	0.2	0.1	6.5	0.4	0.3	0.3	1.9	0.1
Delay (s)	62.0	50.3	53.9	65.2	44.3	440.6	63.9	29.6	80.3	12.4	31.6	39.6
Level of Service	E	D	D	E	D	F	E	C	F	B	C	D
Approach Delay (s/veh)		52.8			106.0			42.7			31.5	
Approach LOS		D			F			D			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	49.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	70.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

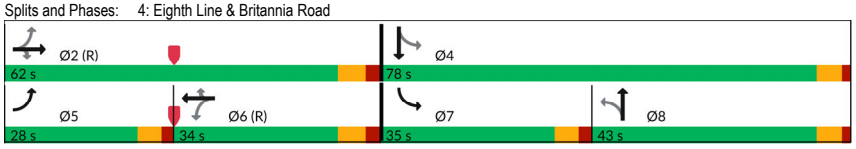
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	931	11	21	548	15	15	40	22	30	82	18
Future Volume (vph)	23	931	11	21	548	15	15	40	22	30	82	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.948			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1633	1825	4433	1633	1362	1809	0	1825	1837	0
Flt Permitted	0.373			0.252			0.690			0.511		
Satd. Flow (perm)	717	4520	1633	484	4433	1633	989	1809	0	982	1837	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		19			12	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	34%	0%	2%	0%	2%	0%
Adj. Flow (vph)	23	950	11	21	559	15	15	41	22	31	84	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	950	11	21	559	15	15	63	0	31	103	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	28.0	62.0	62.0	34.0	34.0	34.0	43.0	43.0		35.0	78.0	
Total Split (%)	20.0%	44.3%	44.3%	24.3%	24.3%	24.3%	30.7%	30.7%		25.0%	55.7%	
Maximum Green (s)	22.0	55.2	55.2	27.2	27.2	27.2	37.3	37.3		29.0	72.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	104.4	103.6	103.6	96.2	96.2	96.2	15.0	15.0		23.6	23.9	
Actuated g/C Ratio	0.75	0.74	0.74	0.69	0.69	0.69	0.11	0.11		0.17	0.17	
v/c Ratio	0.04	0.28	0.01	0.06	0.18	0.01	0.14	0.30		0.15	0.32	
Control Delay (s/veh)	18.1	22.1	2.7	11.5	9.6	0.0	64.3	49.1		39.2	37.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	18.1	22.1	2.7	11.5	9.6	0.0	64.3	49.1		39.2	37.8	
LOS	B	C	A	B	A	A	E	D		D	D	
Approach Delay (s/veh)		21.7			9.4			52.1			38.1	
Approach LOS		C			A			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.32		
Intersection Signal Delay (s/veh): 20.2		Intersection LOS: C
Intersection Capacity Utilization 61.9%		ICU Level of Service B
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	950	11	21	559	15	15	63	31	103
v/c Ratio	0.04	0.28	0.01	0.06	0.18	0.01	0.14	0.30	0.15	0.32
Control Delay (s/veh)	18.1	22.1	2.7	11.5	9.6	0.0	64.3	49.1	39.2	37.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.1	22.1	2.7	11.5	9.6	0.0	64.3	49.1	39.2	37.8
Queue Length 50th (m)	3.8	76.2	0.0	2.2	27.3	0.0	4.2	9.4	7.5	23.9
Queue Length 95th (m)	m8.3	96.7	m0.7	6.4	36.8	0.0	m8.0	m15.8	13.8	34.2
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	708	3345	1226	332	3045	1157	263	495	381	954
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.28	0.01	0.06	0.18	0.01	0.06	0.13	0.08	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	931	11	21	548	15	15	40	22	30	82	18
Future Volume (vph)	23	931	11	21	548	15	15	40	22	30	82	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1633	1825	4433	1633	1362	1808		1825	1838	
Flt Permitted	0.37	1.00	1.00	0.25	1.00	1.00	0.69	1.00		0.51	1.00	
Satd. Flow (perm)	717	4520	1633	485	4433	1633	990	1808		982	1838	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	23	950	11	21	559	15	15	41	22	31	84	19
RTOR Reduction (vph)	0	0	3	0	0	5	0	17	0	0	10	0
Lane Group Flow (vph)	23	950	8	21	559	10	15	46	0	31	93	0
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	34%	0%	2%	0%	2%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	101.2	101.2	101.2	91.4	91.4	91.4	15.0	15.0		26.3	26.3	
Effective Green, g (s)	101.2	101.2	101.2	91.4	91.4	91.4	15.0	15.0		26.3	26.3	
Actuated g/C Ratio	0.72	0.72	0.72	0.65	0.65	0.65	0.11	0.11		0.19	0.19	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	548	3267	1180	316	2894	1066	106	193		216	345	
v/s Ratio Prot	0.00	c0.21			0.13			0.03		0.01	c0.05	
v/s Ratio Perm	0.03		0.00	0.04		0.01	0.02			0.02		
v/c Ratio	0.04	0.29	0.01	0.07	0.19	0.01	0.14	0.24		0.14	0.27	
Uniform Delay, d1	5.6	6.8	5.4	8.8	9.7	8.5	56.7	57.3		47.1	48.6	
Progression Factor	2.94	3.29	1.00	1.00	1.00	1.00	1.08	1.10		0.82	0.82	
Incremental Delay, d2	0.0	0.2	0.0	0.4	0.1	0.0	0.5	0.5		0.3	0.4	
Delay (s)	16.5	22.6	5.4	9.2	9.8	8.5	61.6	63.5		39.2	40.3	
Level of Service	B	C	A	A	A	A	E	E		D	D	
Approach Delay (s/veh)		22.3			9.7			63.1			40.1	
Approach LOS		C			A			E			D	

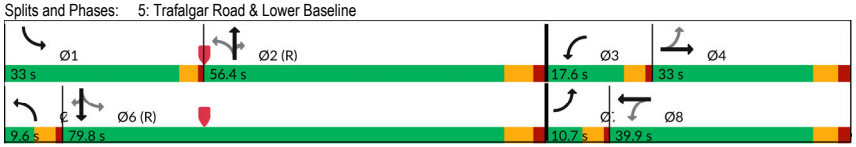
Intersection Summary				
HCM 2000 Control Delay (s/veh)	21.2	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.32			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.5	
Intersection Capacity Utilization	61.9%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	312	63	217	130	110	42	1098	198	366	1600	65
Future Volume (vph)	109	312	63	217	130	110	42	1098	198	366	1600	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt		0.975			0.931				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1858	0	1807	1662	0	1678	4254	1551	1662	4295	1597
Flt Permitted	0.480			0.128			0.079			0.108		
Satd. Flow (perm)	922	1858	0	243	1662	0	140	4254	1551	189	4295	1597
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			29				180			130
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	1%	3%	13%	4%	6%	3%	5%	5%	0%
Adj. Flow (vph)	114	325	66	226	135	115	42	1098	198	381	1667	68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	391	0	226	250	0	42	1098	198	381	1667	68
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		7.0	10.0		5.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2		11.5	24.2		9.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	10.7	33.0		17.6	39.9		9.6	56.4	56.4	33.0	79.8	79.8
Total Split (%)	7.6%	23.6%		12.6%	28.5%		6.9%	40.3%	40.3%	23.6%	57.0%	57.0%
Maximum Green (s)	6.2	26.8		13.1	33.7		5.1	49.8	49.8	29.0	73.2	73.2
Yellow Time (s)	3.5	4.2		3.5	4.2		3.5	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2		3.5	4.2		3.5	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0							
Flash Don't Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	36.7	28.8		47.1	35.7		61.4	54.3	54.3	86.4	77.2	77.2
Actuated g/C Ratio	0.26	0.21		0.34	0.26		0.44	0.39	0.39	0.62	0.55	0.55
v/c Ratio	0.40	1.01		0.95	0.56		0.33	0.67	0.28	0.94	0.70	0.07
Control Delay (s/veh)	38.9	101.9		83.1	45.5		22.6	38.3	6.4	64.4	41.2	5.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	101.9		83.1	45.5		22.6	38.3	6.4	64.4	41.2	5.4
LOS	D	F		F	D		C	D	A	E	D	A
Approach Delay (s/veh)		87.7			63.4			33.1			44.2	
Approach LOS		F			E			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 47.9		Intersection LOS: D	
Intersection Capacity Utilization 87.8%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	114	391	226	250	42	1098	198	381	1667	68
v/c Ratio	0.40	1.01	0.95	0.56	0.33	0.67	0.28	0.94	0.70	0.07
Control Delay (s/veh)	38.9	101.9	83.1	45.5	22.6	38.3	6.4	64.4	41.2	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	101.9	83.1	45.5	22.6	38.3	6.4	64.4	41.2	5.4
Queue Length 50th (m)	22.3	~110.0	47.8	54.8	4.5	112.1	3.3	95.0	177.7	1.1
Queue Length 95th (m)	37.4	#176.5	#97.3	84.0	9.5	132.2	19.8	#142.3	205.5	m4.6
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	288	387	239	445	128	1649	711	432	2368	938
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	1.01	0.95	0.56	0.33	0.67	0.28	0.88	0.70	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	312	63	217	130	110	42	1098	198	366	1600	65
Future Volume (vph)	109	312	63	217	130	110	42	1098	198	366	1600	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2		3.5	4.2		3.5	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	0.97		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1825	1857		1807	1662		1678	4254	1551	1662	4295	1597
Flt Permitted	0.48	1.00		0.13	1.00		0.08	1.00	1.00	0.11	1.00	1.00
Satd. Flow (perm)	922	1857		243	1662		140	4254	1551	189	4295	1597
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	114	325	66	226	135	115	42	1098	198	381	1667	68
RTOR Reduction (vph)	0	6	0	0	22	0	0	0	110	0	0	31
Lane Group Flow (vph)	114	385	0	226	228	0	42	1098	88	381	1667	37
Heavy Vehicles (%)	0%	1%	0%	1%	3%	13%	4%	6%	3%	5%	5%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	33.0	26.8		44.4	33.7		56.3	52.3	52.3	82.8	74.3	74.3
Effective Green, g (s)	35.0	28.8		45.4	35.7		58.3	54.3	54.3	83.8	76.3	76.3
Actuated g/C Ratio	0.25	0.21		0.32	0.26		0.42	0.39	0.39	0.60	0.54	0.54
Clearance Time (s)	4.5	6.2		4.5	6.2		4.5	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Lane Grp Cap (vph)	276	382		236	423		113	1649	601	402	2340	870
v/s Ratio Prot	0.02	c0.21		c0.10	0.14		0.01	0.26		c0.19	0.39	
v/s Ratio Perm	0.08			0.21			0.14		0.06	c0.38		0.02
v/c Ratio	0.41	1.01		0.96	0.54		0.37	0.67	0.15	0.95	0.71	0.04
Uniform Delay, d1	42.1	55.6		39.6	45.1		25.3	35.4	27.8	38.8	23.7	14.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.08	1.68	1.00
Incremental Delay, d2	1.0	48.3		46.0	2.4		0.8	2.1	0.5	26.4	1.5	0.1
Delay (s)	43.1	103.9		85.5	47.5		26.0	37.5	28.3	68.4	41.2	14.9
Level of Service	D	F		F	D		C	D	C	E	D	B
Approach Delay (s/veh)		90.2			65.5			35.8			45.3	
Approach LOS		F			E			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	49.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.98			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.8	
Intersection Capacity Utilization	87.8%	ICU Level of Service	E	
Analysis Period (min)	15			

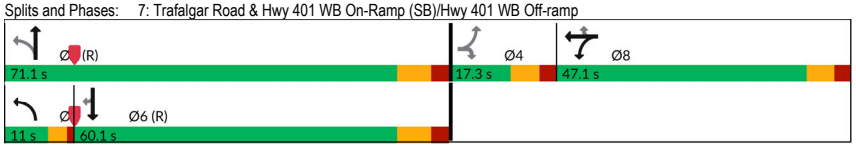
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	180	6	280	11	426	0	0	1093	117
Future Volume (vph)	0	0	5	180	6	280	11	426	0	0	1093	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1601	3471	1883	2818	1789	4520	0	0	4520	1601
Flt Permitted				0.950			0.189					
Satd. Flow (perm)	1883	0	1601	3471	1883	2818	356	4520	0	0	4520	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			290			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	5	180	6	280	11	426	0	0	1093	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	5	180	6	280	11	426	0	0	1093	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	11.9	11.9	11.9	109.1	105.0			100.6	100.6
Actuated g/C Ratio			0.07	0.09	0.09	0.09	0.81	0.77			0.74	0.74
v/c Ratio			0.01	0.59	0.04	0.56	0.03	0.12			0.33	0.10
Control Delay (s/veh)			0.0	67.5	55.5	10.7	4.7	4.7			7.9	1.8
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.0	67.5	55.5	10.7	4.7	4.7			7.9	1.8
LOS			A	E	E	B	A	A			A	A
Approach Delay (s/veh)					33.2			4.7			7.3	
Approach LOS					C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 12.4		Intersection LOS: B	
Intersection Capacity Utilization 56.5%		ICU Level of Service B	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	5	180	6	280	11	426	1093	117
v/c Ratio	0.01	0.59	0.04	0.56	0.03	0.12	0.33	0.10
Control Delay (s/veh)	0.0	67.5	55.5	10.7	4.7	4.7	7.9	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.0	67.5	55.5	10.7	4.7	4.7	7.9	1.8
Queue Length 50th (m)	0.0	24.7	1.5	0.0	0.4	8.7	26.7	0.0
Queue Length 95th (m)	0.0	36.3	6.0	14.4	2.9	22.7	79.9	7.5
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	386	1024	555	1029	360	3501	3354	1220
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.18	0.01	0.27	0.03	0.12	0.33	0.10

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	180	6	280	11	426	0	0	1093	117
Future Volume (vph)	0	0	5	180	6	280	11	426	0	0	1093	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1601	3471	1883	2818	1789	4520			4520	1601
Flt Permitted			1.00	0.95	1.00	1.00	0.19	1.00			1.00	1.00
Satd. Flow (perm)			1601	3471	1883	2818	357	4520			4520	1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	5	180	6	280	11	426	0	0	1093	117
RTOR Reduction (vph)	0	0	5	0	0	255	0	0	0	0	0	37
Lane Group Flow (vph)	0	0	0	180	6	25	11	426	0	0	1093	80
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	11.9	11.9	11.9	99.1	99.1			92.3	92.3
Effective Green, g (s)			2.0	11.9	11.9	11.9	99.1	99.1			92.3	92.3
Actuated g/C Ratio			0.01	0.09	0.09	0.09	0.73	0.73			0.68	0.68
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			23	304	165	247	290	3305			3078	1090
v/s Ratio Prot				c0.05	0.00		0.00	c0.09			c0.24	
v/s Ratio Perm			c0.00			0.01	0.03					0.05
v/c Ratio			0.00	0.59	0.04	0.10	0.04	0.13			0.36	0.07
Uniform Delay, d1			65.8	59.5	56.6	56.9	5.3	5.4			9.1	7.2
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	2.1	0.0	0.1	0.0	0.1			0.3	0.1
Delay (s)			65.8	61.5	56.6	56.9	5.4	5.5			9.4	7.4
Level of Service			E	E	E	E	A	A			A	A
Approach Delay (s/veh)		65.8			58.7			5.5			9.2	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

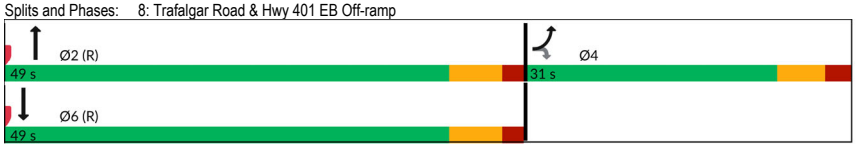
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	418	0	680	540	0
Future Volume (vph)	114	418	0	680	540	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.903	0.850				
Flt Protected	0.983					
Satd. Flow (prot)	3243	1457	0	4520	4520	0
Flt Permitted	0.983					
Satd. Flow (perm)	3243	1457	0	4520	4520	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	209	209				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	418	0	680	540	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	323	209	0	680	540	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	10.8	10.8		55.2	55.2	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
v/c Ratio	0.52	0.55		0.22	0.17	
Control Delay (s/veh)	14.9	10.9		4.9	4.7	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	14.9	10.9		4.9	4.7	
LOS	B	B		A	A	
Approach Delay (s/veh)	13.3			4.9	4.7	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 7.4		Intersection LOS: A	
Intersection Capacity Utilization 48.9%		ICU Level of Service A	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	323	209	680	540
v/c Ratio	0.52	0.55	0.22	0.17
Control Delay (s/veh)	14.9	10.9	4.9	4.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.9	10.9	4.9	4.7
Queue Length 50th (m)	8.3	0.0	12.9	9.8
Queue Length 95th (m)	18.7	19.0	21.3	16.7
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	1119	583	3118	3118
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.36	0.22	0.17

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	418	0	680	540	0
Future Volume (vph)	114	418	0	680	540	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	3242	1457		4520	4520	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	3242	1457		4520	4520	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	418	0	680	540	0
RTOR Reduction (vph)	181	181	0	0	0	0
Lane Group Flow (vph)	142	28	0	680	540	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	10.8	10.8		55.2	55.2	
Effective Green, g (s)	10.8	10.8		55.2	55.2	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	437	196		3118	3118	
v/s Ratio Prot	c0.04			c0.15	0.12	
v/s Ratio Perm		0.02				
v/c Ratio	0.33	0.14		0.22	0.17	
Uniform Delay, d1	31.3	30.5		4.5	4.4	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.3		0.2	0.1	
Delay (s)	31.7	30.9		4.7	4.5	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	31.4			4.7	4.5	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

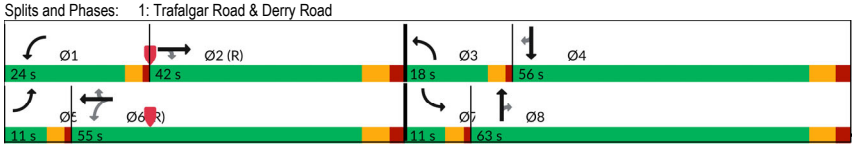
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
Future Volume (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3437	4520	1570	1825	4433	1633	3054	4137	1597	3268	3991	923
Flt Permitted	0.950			0.201			0.950			0.950		
Satd. Flow (perm)	3437	4520	1570	386	4433	1633	3054	4137	1597	3268	3991	923
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			170			123			157			155
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	4%	0%	4%	0%	7%	9%	0%	0%	13%	73%
Adj. Flow (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	11.0	42.0	42.0	24.0	55.0	55.0	18.0	63.0	63.0	11.0	56.0	56.0
Total Split (%)	7.9%	30.0%	30.0%	17.1%	39.3%	39.3%	12.9%	45.0%	45.0%	7.9%	40.0%	40.0%
Maximum Green (s)	7.0	35.1	35.1	20.0	48.1	48.1	14.0	56.2	56.2	7.0	49.2	49.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.0	38.7	38.7	63.0	50.1	50.1	15.0	58.2	58.2	8.0	51.2	51.2
Actuated g/C Ratio	0.06	0.28	0.28	0.45	0.36	0.36	0.11	0.42	0.42	0.06	0.37	0.37
v/c Ratio	0.80	0.55	0.31	0.69	1.00	0.11	1.09	0.60	0.21	0.43	0.45	0.99
Control Delay (s/veh)	127.1	31.8	5.3	35.0	61.1	2.2	110.8	36.0	13.9	69.4	32.8	70.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	127.1	31.8	5.3	35.0	61.1	2.2	110.8	36.0	13.9	69.4	32.8	70.8
LOS	F	C	A	D	E	A	F	D	B	E	C	E
Approach Delay (s/veh)		42.0			55.4			51.0			49.4	
Approach LOS		D			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay (s/veh): 50.6		Intersection LOS: D	
Intersection Capacity Utilization 79.0%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
v/c Ratio	0.80	0.55	0.31	0.69	1.00	0.11	1.09	0.60	0.21	0.43	0.45	0.99
Control Delay (s/veh)	127.1	31.8	5.3	35.0	61.1	2.2	110.8	36.0	13.9	69.4	32.8	70.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	127.1	31.8	5.3	35.0	61.1	2.2	110.8	36.0	13.9	69.4	32.8	70.8
Queue Length 50th (m)	24.3	69.6	14.1	51.0	~157.0	1.0	~62.2	118.4	24.3	11.2	63.0	151.5
Queue Length 95th (m)	#42.2	85.5	21.8	59.2	#227.1	2.5	#91.7	138.0	42.2	20.0	78.1	#252.0
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	196	1249	557	389	1586	663	327	1719	755	186	1459	435
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.55	0.31	0.66	1.00	0.11	1.09	0.60	0.21	0.43	0.45	0.99

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
Future Volume (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3437	4520	1570	1825	4433	1633	3054	4137	1597	3268	3991	923
Flt Permitted	0.95	1.00	1.00	0.20	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3437	4520	1570	386	4433	1633	3054	4137	1597	3268	3991	923
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	156	682	170	256	1589	72	358	1036	157	80	655	431
RTOR Reduction (vph)	0	0	123	0	0	46	0	0	92	0	0	98
Lane Group Flow (vph)	156	682	47	256	1589	26	358	1036	65	80	655	333
Heavy Vehicles (%)	3%	2%	4%	0%	4%	0%	7%	9%	0%	0%	13%	73%
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Actuated Green, G (s)	7.0	36.7	36.7	59.1	48.1	48.1	14.0	56.2	56.2	7.0	49.2	49.2
Effective Green, g (s)	8.0	38.7	38.7	60.1	50.1	50.1	15.0	58.2	58.2	8.0	51.2	51.2
Actuated g/C Ratio	0.06	0.28	0.28	0.43	0.36	0.36	0.11	0.42	0.42	0.06	0.37	0.37
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	196	1249	433	365	1586	584	327	1719	663	186	1459	337
v/s Ratio Prot	c0.05	0.15		0.10	c0.36		c0.12	0.25		0.02	0.16	
v/s Ratio Perm			0.03	0.20		0.02			0.04			c0.36
v/c Ratio	0.80	0.55	0.11	0.70	1.00	0.04	1.09	0.60	0.10	0.43	0.45	0.99
Uniform Delay, d1	65.2	43.2	37.8	28.2	44.9	29.3	62.5	31.9	24.9	63.8	33.7	44.1
Progression Factor	1.58	0.69	0.71	1.06	0.88	5.80	0.59	1.08	3.68	0.97	0.94	1.09
Incremental Delay, d2	20.9	1.6	0.5	6.5	21.5	0.1	74.1	0.8	0.1	3.2	0.4	44.7
Delay (s)	124.1	31.3	27.2	36.3	61.0	170.2	111.1	35.1	91.8	65.3	32.1	92.5
Level of Service	F	C	C	D	E	F	F	D	F	E	C	F
Approach Delay (s/veh)		45.0			61.8			58.4			56.7	
Approach LOS		D			E			E			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	56.8	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.99			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	79.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

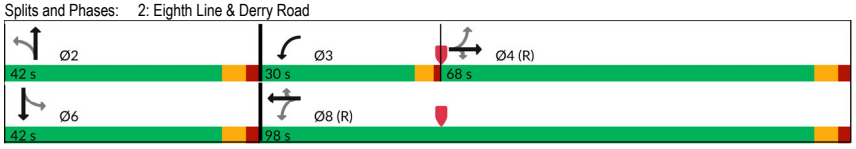
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	881	27	61	1873	3	45	0	57	3	4	6
Future Volume (vph)	3	881	27	61	1873	3	45	0	57	3	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.910	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1825	4520	1633	1825	1633	0	1825	1734	0
Flt Permitted	0.081			0.260			0.751			0.720		
Satd. Flow (perm)	153	4520	1601	499	4520	1633	1443	1633	0	1383	1734	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			55			23		377			6	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	2%	0%	2%	0%	0%	2%	0%	0%	2%	0%
Adj. Flow (vph)	3	881	27	61	1873	3	45	0	57	3	4	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	881	27	61	1873	3	45	57	0	3	10	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		36.0	36.0	
Total Split (s)	68.0	68.0	68.0	30.0	98.0	98.0	42.0	42.0		42.0	42.0	
Total Split (%)	48.6%	48.6%	48.6%	21.4%	70.0%	70.0%	30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	62.0	62.0	62.0	26.0	92.0	92.0	36.0	36.0		36.0	36.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0		0	0	
Act Effct Green (s)	113.0	113.0	113.0	122.1	121.3	121.3	11.1	11.1		11.1	11.1	
Actuated g/C Ratio	0.81	0.81	0.81	0.87	0.87	0.87	0.08	0.08		0.08	0.08	
v/c Ratio	0.02	0.24	0.02	0.12	0.48	0.00	0.39	0.12		0.03	0.07	
Control Delay (s/veh)	6.7	11.6	2.4	2.3	3.3	0.0	45.2	1.0		58.7	40.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	6.7	11.6	2.4	2.3	3.3	0.0	45.2	1.0		58.7	40.2	
LOS	A	B	A	A	A	A	D	A		E	D	
Approach Delay (s/veh)		11.3			3.3			20.5			44.5	
Approach LOS		B			A			C			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 85		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.48		
Intersection Signal Delay (s/veh): 6.5		Intersection LOS: A
Intersection Capacity Utilization 69.9%		ICU Level of Service C
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	3	881	27	61	1873	3	45	57	3	10
v/c Ratio	0.02	0.24	0.02	0.12	0.48	0.00	0.39	0.12	0.03	0.07
Control Delay (s/veh)	6.7	11.6	2.4	2.3	3.3	0.0	45.2	1.0	58.7	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.7	11.6	2.4	2.3	3.3	0.0	45.2	1.0	58.7	40.2
Queue Length 50th (m)	0.5	77.5	1.6	1.9	45.7	0.0	12.7	0.0	0.8	1.1
Queue Length 95th (m)	m0.7	95.9	3.0	4.6	64.7	0.0	13.2	0.3	3.8	6.8
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	123	3648	1302	681	3916	1418	371	699	355	450
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.24	0.02	0.09	0.48	0.00	0.12	0.08	0.01	0.02

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	881	27	61	1873	3	45	0	57	3	4	6
Future Volume (vph)	3	881	27	61	1873	3	45	0	57	3	4	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	4520	1601	1825	4520	1633	1825	1633		1825	1734	
Flt Permitted	0.08	1.00	1.00	0.26	1.00	1.00	0.75	1.00		0.72	1.00	
Satd. Flow (perm)	153	4520	1601	499	4520	1633	1443	1633		1383	1734	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	3	881	27	61	1873	3	45	0	57	3	4	6
RTOR Reduction (vph)	0	0	6	0	0	0	0	53	0	0	6	0
Lane Group Flow (vph)	3	881	21	61	1873	3	45	4	0	3	4	0
Heavy Vehicles (%)	2%	2%	2%	0%	2%	0%	0%	2%	0%	0%	2%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	109.8	109.8	109.8	118.9	118.9	118.9	9.1	9.1		9.1	9.1	
Effective Green, g (s)	109.8	109.8	109.8	118.9	118.9	118.9	9.1	9.1		9.1	9.1	
Actuated g/C Ratio	0.78	0.78	0.78	0.85	0.85	0.85	0.07	0.07		0.07	0.07	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	119	3544	1255	472	3838	1386	93	106		89	112	
v/s Ratio Prot		0.19		0.00	c0.41			0.00			0.00	
v/s Ratio Perm	0.02		0.01	0.10		0.00	c0.03			0.00		
v/c Ratio	0.03	0.25	0.02	0.13	0.49	0.00	0.48	0.03		0.03	0.04	
Uniform Delay, d1	3.3	4.0	3.3	1.8	2.7	1.6	63.2	61.3		61.3	61.4	
Progression Factor	1.33	2.59	11.82	1.00	1.00	1.00	0.58	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.2	0.0	0.1	0.4	0.0	3.9	0.1		0.2	0.1	
Delay (s)	4.8	10.6	39.0	1.9	3.2	1.6	40.3	61.5		61.5	61.5	
Level of Service	A	B	D	A	A	A	D	E		E	E	
Approach Delay (s/veh)		11.5			3.1			52.1			61.5	
Approach LOS		B			A			D			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	7.6	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			

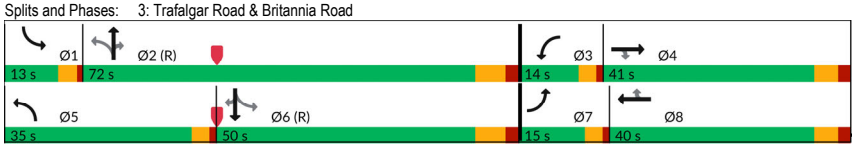
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
Future Volume (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3309	4520	1601	3541	4391	1633	1636	4254	1597	1652	4254	1597
Flt Permitted	0.950			0.950			0.102			0.166		
Satd. Flow (perm)	3309	4520	1601	3541	4391	1633	176	4254	1597	289	4254	1597
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			189			125			168			202
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	2%	2%	0%	5%	0%	3%	6%	0%	2%	6%	0%
Adj. Flow (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	15.0	41.0	41.0	14.0	40.0	40.0	35.0	72.0	72.0	13.0	50.0	50.0
Total Split (%)	10.7%	29.3%	29.3%	10.0%	28.6%	28.6%	25.0%	51.4%	51.4%	9.3%	35.7%	35.7%
Maximum Green (s)	11.0	35.0	35.0	10.0	34.0	34.0	31.0	65.0	65.0	9.0	43.0	43.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	10.6	32.4	32.4	10.6	32.4	32.4	87.0	72.8	72.8	56.2	45.0	45.0
Actuated g/C Ratio	0.08	0.23	0.23	0.08	0.23	0.23	0.62	0.52	0.52	0.40	0.32	0.32
v/c Ratio	0.44	0.51	0.37	0.55	0.77	0.21	0.95	0.59	0.20	0.42	0.74	0.40
Control Delay (s/veh)	67.1	48.2	7.3	66.7	49.3	5.1	59.8	51.7	21.6	28.6	39.5	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.1	48.2	7.3	66.7	49.3	5.1	59.8	51.7	21.6	28.6	39.5	9.4
LOS	E	D	A	E	D	A	E	D	C	C	D	A
Approach Delay (s/veh)		41.4			47.6			50.9			33.0	
Approach LOS		D			D			D			C	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 125		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.95		
Intersection Signal Delay (s/veh): 44.0		Intersection LOS: D
Intersection Capacity Utilization 82.1%		ICU Level of Service E
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
v/c Ratio	0.44	0.51	0.37	0.55	0.77	0.21	0.95	0.59	0.20	0.42	0.74	0.40
Control Delay (s/veh)	67.1	48.2	7.3	66.7	49.3	5.1	59.8	51.7	21.6	28.6	39.5	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.1	48.2	7.3	66.7	49.3	5.1	59.8	51.7	21.6	28.6	39.5	9.4
Queue Length 50th (m)	15.9	54.8	0.0	20.7	89.3	1.3	128.8	153.6	23.8	11.3	106.8	24.3
Queue Length 95th (m)	26.0	66.5	18.7	25.0	105.0	14.6	m#162.6	m175.1	m28.4	m18.6	130.7	42.6
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	283	1194	562	278	1129	512	495	2211	910	215	1367	650
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.45	0.34	0.53	0.70	0.19	0.95	0.59	0.20	0.40	0.74	0.40

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
Future Volume (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3309	4520	1601	3541	4391	1633	1636	4254	1597	1652	4254	1597
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.10	1.00	1.00	0.17	1.00	1.00
Satd. Flow (perm)	3309	4520	1601	3541	4391	1633	175	4254	1597	289	4254	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	109	536	189	148	786	98	470	1297	180	87	1005	262
RTOR Reduction (vph)	0	0	145	0	0	75	0	0	81	0	0	137
Lane Group Flow (vph)	109	536	44	148	786	23	470	1297	99	87	1005	125
Heavy Vehicles (%)	7%	2%	2%	0%	5%	0%	3%	6%	0%	2%	6%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Actuated Green, G (s)	9.6	30.4	30.4	9.6	30.4	30.4	83.0	70.8	70.8	51.2	43.0	43.0
Effective Green, g (s)	10.6	32.4	32.4	10.6	32.4	32.4	84.0	72.8	72.8	53.2	45.0	45.0
Actuated g/C Ratio	0.08	0.23	0.23	0.08	0.23	0.23	0.60	0.52	0.52	0.38	0.32	0.32
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	250	1046	370	268	1016	377	491	2212	830	199	1367	513
v/s Ratio Prot	0.03	0.12		c0.04	c0.18		c0.25	0.30		0.03	0.24	
v/s Ratio Perm			0.03			0.01	c0.32		0.06	0.14		0.08
v/c Ratio	0.44	0.51	0.12	0.55	0.77	0.06	0.96	0.59	0.12	0.44	0.74	0.24
Uniform Delay, d1	61.8	46.9	42.5	62.4	50.4	41.9	40.2	23.2	17.2	28.4	42.2	35.0
Progression Factor	1.00	1.00	1.00	0.94	0.87	1.40	1.15	2.11	6.06	1.39	0.85	0.82
Incremental Delay, d2	1.2	0.4	0.1	2.4	3.6	0.1	17.3	0.5	0.1	1.4	3.3	1.1
Delay (s)	63.1	47.3	42.7	61.2	47.5	58.6	63.4	49.5	104.3	40.9	39.3	29.8
Level of Service	E	D	D	E	D	E	E	D	F	D	D	C
Approach Delay (s/veh)		48.3			50.6			57.9			37.5	
Approach LOS		D			D			E			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	49.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.89			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	82.1%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

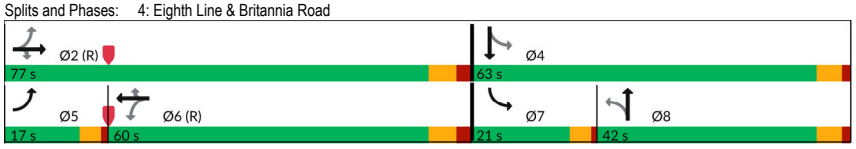
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	758	12	24	968	24	31	63	36	18	34	33
Future Volume (vph)	15	758	12	24	968	24	31	63	36	18	34	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.945			0.926	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1633	1825	4433	1633	1362	1802	0	1825	1761	0
Flt Permitted	0.223			0.316			0.713			0.481		
Satd. Flow (perm)	428	4520	1633	607	4433	1633	1022	1802	0	924	1761	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		20			33	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	34%	0%	2%	0%	2%	0%
Adj. Flow (vph)	15	758	12	24	968	24	31	63	36	18	34	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	758	12	24	968	24	31	99	0	18	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	17.0	77.0	77.0	60.0	60.0	60.0	42.0	42.0		21.0	63.0	
Total Split (%)	12.1%	55.0%	55.0%	42.9%	42.9%	42.9%	30.0%	30.0%		15.0%	45.0%	
Maximum Green (s)	12.5	70.2	70.2	53.2	53.2	53.2	36.3	36.3		16.5	57.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	109.4	107.1	107.1	102.9	102.9	102.9	15.3	15.3		21.6	20.4	
Actuated g/C Ratio	0.78	0.77	0.77	0.74	0.74	0.74	0.11	0.11		0.15	0.15	
v/c Ratio	0.04	0.22	0.01	0.05	0.30	0.02	0.28	0.46		0.10	0.24	
Control Delay (s/veh)	3.6	2.8	0.0	8.6	7.9	0.0	67.0	56.1		50.1	31.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	3.6	2.8	0.0	8.6	7.9	0.0	67.0	56.1		50.1	31.0	
LOS	A	A	A	A	A	A	E	E		D	C	
Approach Delay (s/veh)		2.8			7.7			58.7			35.0	
Approach LOS		A			A			E			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.46		
Intersection Signal Delay (s/veh): 10.3	Intersection LOS: B	
Intersection Capacity Utilization 61.9%	ICU Level of Service B	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	15	758	12	24	968	24	31	99	18	67
v/c Ratio	0.04	0.22	0.01	0.05	0.30	0.02	0.28	0.46	0.10	0.24
Control Delay (s/veh)	3.6	2.8	0.0	8.6	7.9	0.0	67.0	56.1	50.1	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.6	2.8	0.0	8.6	7.9	0.0	67.0	56.1	50.1	31.0
Queue Length 50th (m)	0.4	9.4	0.0	1.2	24.1	0.0	10.1	21.1	4.8	9.9
Queue Length 95th (m)	m1.6	18.0	m0.0	6.5	63.0	0.0	m20.5	m35.8	11.3	22.7
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	459	3459	1263	445	3257	1224	264	482	249	740
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.22	0.01	0.05	0.30	0.02	0.12	0.21	0.07	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	758	12	24	968	24	31	63	36	18	34	33
Future Volume (vph)	15	758	12	24	968	24	31	63	36	18	34	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1633	1825	4433	1633	1362	1803		1825	1761	
Flt Permitted	0.22	1.00	1.00	0.32	1.00	1.00	0.71	1.00		0.48	1.00	
Satd. Flow (perm)	428	4520	1633	608	4433	1633	1023	1803		924	1761	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	15	758	12	24	968	24	31	63	36	18	34	33
RTOR Reduction (vph)	0	0	3	0	0	7	0	18	0	0	28	0
Lane Group Flow (vph)	15	758	9	24	968	17	31	81	0	18	39	0
Heavy Vehicles (%)	0%	2%	0%	0%	4%	0%	34%	0%	2%	0%	2%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	104.5	104.5	104.5	97.5	97.5	97.5	15.3	15.3		23.0	23.0	
Effective Green, g (s)	104.5	104.5	104.5	97.5	97.5	97.5	15.3	15.3		23.0	23.0	
Actuated g/C Ratio	0.75	0.75	0.75	0.70	0.70	0.70	0.11	0.11		0.16	0.16	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	344	3373	1218	423	3087	1137	111	197		172	289	
v/s Ratio Prot	0.00	c0.17			c0.22			c0.05		0.00	c0.02	
v/s Ratio Perm	0.03		0.01	0.04		0.01	0.03			0.01		
v/c Ratio	0.04	0.22	0.01	0.06	0.31	0.01	0.28	0.41		0.10	0.14	
Uniform Delay, d1	4.9	5.4	4.5	6.7	8.3	6.5	57.3	58.2		49.5	50.0	
Progression Factor	0.73	0.52	1.00	1.00	1.00	1.00	1.05	1.05		1.05	1.06	
Incremental Delay, d2	0.0	0.1	0.0	0.3	0.3	0.0	1.3	1.3		0.3	0.2	
Delay (s)	3.6	3.0	4.5	7.0	8.5	6.5	61.7	62.7		52.0	53.0	
Level of Service	A	A	A	A	A	A	E	E		D	D	
Approach Delay (s/veh)		3.0			8.4			62.4			52.8	
Approach LOS		A			A			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	11.7	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.33				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		21.5	
Intersection Capacity Utilization	61.9%	ICU Level of Service		B	
Analysis Period (min)	15				

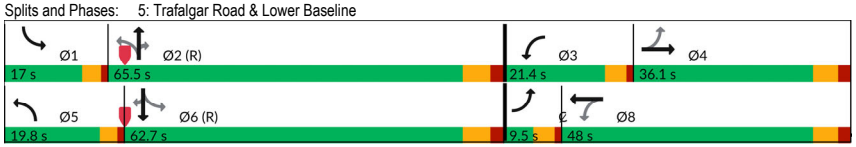
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	209	34	204	327	227	236	1675	297	206	1161	56
Future Volume (vph)	30	209	34	204	327	227	236	1675	297	206	1161	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt		0.979			0.939				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1865	0	1807	1684	0	1678	4254	1551	1662	4295	1597
Flt Permitted	0.122			0.375			0.106			0.070		
Satd. Flow (perm)	234	1865	0	713	1684	0	187	4254	1551	122	4295	1597
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			26				198			126
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	1%	3%	13%	4%	6%	3%	5%	5%	0%
Adj. Flow (vph)	30	209	34	204	327	227	236	1675	297	206	1161	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	243	0	204	554	0	236	1675	297	206	1161	56
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		7.0	10.0		7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2		11.5	24.2		11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	36.1		21.4	48.0		19.8	65.5	65.5	17.0	62.7	62.7
Total Split (%)	6.8%	25.8%		15.3%	34.3%		14.1%	46.8%	46.8%	12.1%	44.8%	44.8%
Maximum Green (s)	5.0	29.9		16.9	41.8		15.8	58.9	58.9	13.0	56.1	56.1
Yellow Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0							
Flash Don't Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	42.3	35.6		54.0	47.6		77.8	61.1	61.1	75.2	59.8	59.8
Actuated g/C Ratio	0.30	0.25		0.39	0.34		0.56	0.44	0.44	0.54	0.43	0.43
v/c Ratio	0.22	0.51		0.53	0.94		0.89	0.90	0.38	0.95	0.63	0.07
Control Delay (s/veh)	31.6	49.0		35.3	68.2		61.3	44.6	10.0	93.6	48.1	6.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.6	49.0		35.3	68.2		61.3	44.6	10.0	93.6	48.1	6.5
LOS	C	D		D	E		E	D	B	F	D	A
Approach Delay (s/veh)		47.1			59.3			41.7			53.0	
Approach LOS		D			E			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.95		
Intersection Signal Delay (s/veh): 48.4	Intersection LOS: D	
Intersection Capacity Utilization 93.0%	ICU Level of Service F	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	30	243	204	554	236	1675	297	206	1161	56
v/c Ratio	0.22	0.51	0.53	0.94	0.89	0.90	0.38	0.95	0.63	0.07
Control Delay (s/veh)	31.6	49.0	35.3	68.2	61.3	44.6	10.0	93.6	48.1	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.6	49.0	35.3	68.2	61.3	44.6	10.0	93.6	48.1	6.5
Queue Length 50th (m)	5.2	57.5	39.2	~160.4	40.5	186.1	16.7	54.6	99.9	1.1
Queue Length 95th (m)	12.0	87.7	59.1	#232.6	#84.9	213.3	38.9	m#91.3	122.9	m4.0
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	139	478	414	589	284	1857	788	219	1835	754
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.51	0.49	0.94	0.83	0.90	0.38	0.94	0.63	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	209	34	204	327	227	236	1675	297	206	1161	56
Future Volume (vph)	30	209	34	204	327	227	236	1675	297	206	1161	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	0.98		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1825	1865		1807	1684		1678	4254	1551	1662	4295	1597
Flt Permitted	0.12	1.00		0.37	1.00		0.11	1.00	1.00	0.07	1.00	1.00
Satd. Flow (perm)	234	1865		713	1684		187	4254	1551	123	4295	1597
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	209	34	204	327	227	236	1675	297	206	1161	56
RTOR Reduction (vph)	0	4	0	0	17	0	0	0	114	0	0	33
Lane Group Flow (vph)	30	239	0	204	537	0	236	1675	183	206	1161	23
Heavy Vehicles (%)	0%	1%	0%	1%	3%	13%	4%	6%	3%	5%	5%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	38.4	35.4		53.1	45.6		71.4	57.3	57.3	68.8	56.0	56.0
Effective Green, g (s)	40.4	37.4		54.1	47.6		73.4	59.3	59.3	70.8	58.0	58.0
Actuated g/C Ratio	0.29	0.27		0.39	0.34		0.52	0.42	0.42	0.51	0.41	0.41
Clearance Time (s)	4.5	6.2		4.5	6.2		4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Lane Grp Cap (vph)	112	498		386	572		258	1801	656	213	1779	661
v/s Ratio Prot	0.01	0.13		c0.05	c0.32		c0.10	c0.39		c0.09	0.27	
v/s Ratio Perm	0.07			0.15			0.38		0.12	0.39		0.01
v/c Ratio	0.27	0.48		0.53	0.94		0.91	0.93	0.28	0.97	0.65	0.04
Uniform Delay, d1	38.7	43.1		30.7	44.8		32.2	38.4	26.4	43.0	32.9	24.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.44	1.46	1.00
Incremental Delay, d2	1.3	1.5		0.6	23.9		33.5	10.1	1.1	44.9	1.5	0.1
Delay (s)	39.9	44.7		31.3	68.7		65.7	48.4	27.4	106.8	49.5	24.4
Level of Service	D	D		C	E		E	D	C	F	D	C
Approach Delay (s/veh)		44.1			58.7			47.5			56.8	
Approach LOS		D			E			D			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	51.9	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	93.0%	ICU Level of Service	F	
Analysis Period (min)	15			

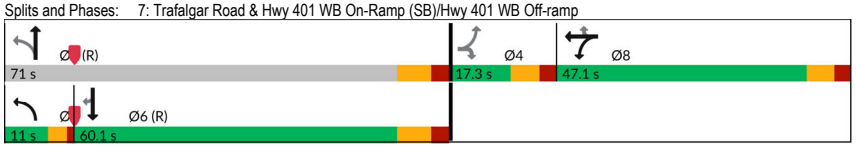
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	16	611	27	1396	6	850	0	0	705	45
Future Volume (vph)	17	0	16	611	27	1396	6	850	0	0	705	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1789	0	1601	3471	1883	2818	1789	4520	0	0	4520	1601
Flt Permitted	0.597			0.950			0.179					
Satd. Flow (perm)	1124	0	1601	3471	1883	2818	337	4520	0	0	4520	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			352						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	16	611	27	1396	6	850	0	0	705	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	16	611	27	1396	6	850	0	0	705	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.7		10.7	70.0	70.0	70.0	43.3	39.2			37.0	37.0
Actuated g/C Ratio	0.08		0.08	0.52	0.52	0.52	0.32	0.29			0.27	0.27
v/c Ratio	0.19		0.07	0.34	0.03	0.86	0.03	0.65			0.57	0.09
Control Delay (s/veh)	63.1		0.5	22.1	21.3	29.1	29.3	44.4			44.5	0.3
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.1		0.5	22.1	21.3	29.1	29.3	44.4			44.5	0.3
LOS	E		A	C	C	C	C	D			D	A
Approach Delay (s/veh)		32.7			26.9			44.3			41.9	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 34.1		Intersection LOS: C	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	16	611	27	1396	6	850	705	45
v/c Ratio	0.19	0.07	0.34	0.03	0.86	0.03	0.65	0.57	0.09
Control Delay (s/veh)	63.1	0.5	22.1	21.3	29.1	29.3	44.4	44.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.1	0.5	22.1	21.3	29.1	29.3	44.4	44.5	0.3
Queue Length 50th (m)	4.4	0.0	52.5	3.8	156.6	1.1	85.9	68.5	0.0
Queue Length 95th (m)	12.2	0.0	79.1	10.8	#248.2	4.1	93.6	86.3	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	88	246	1792	972	1625	182	2101	1734	690
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	0.34	0.03	0.86	0.03	0.40	0.41	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	16	611	27	1396	6	850	0	0	705	45
Future Volume (vph)	17	0	16	611	27	1396	6	850	0	0	705	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1789		1601	3471	1883	2818	1789	4520			4520	1601
Flt Permitted	0.60		1.00	0.95	1.00	1.00	0.18	1.00			1.00	1.00
Satd. Flow (perm)	1124		1601	3471	1883	2818	338	4520			4520	1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	16	611	27	1396	6	850	0	0	705	45
RTOR Reduction (vph)	0	0	15	0	0	170	0	0	0	0	0	35
Lane Group Flow (vph)	17	0	1	611	27	1226	6	850	0	0	705	10
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.7		6.7	70.0	70.0	70.0	36.3	36.3			30.9	30.9
Effective Green, g (s)	6.7		6.7	70.0	70.0	70.0	36.3	36.3			30.9	30.9
Actuated g/C Ratio	0.05		0.05	0.52	0.52	0.52	0.27	0.27			0.23	0.23
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	55		79	1793	972	1455	105	1210			1030	365
v/s Ratio Prot				0.18	0.01		0.00	c0.19			0.16	
v/s Ratio Perm	c0.02		0.00			c0.44	0.01					0.01
v/c Ratio	0.31		0.01	0.34	0.03	0.84	0.06	0.70			0.68	0.03
Uniform Delay, d1	62.2		61.2	19.2	16.1	28.0	37.4	44.7			47.8	40.6
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.2		0.1	0.0	0.0	4.4	0.1	3.4			3.7	0.1
Delay (s)	65.4		61.3	19.3	16.1	32.5	37.5	48.2			51.5	40.8
Level of Service	E		E	B	B	C	D	D			D	D
Approach Delay (s/veh)		63.4			28.3			48.1			50.9	
Approach LOS		E			C			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	37.8	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.79				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5		
Intersection Capacity Utilization	84.8%	ICU Level of Service	E		
Analysis Period (min)	15				

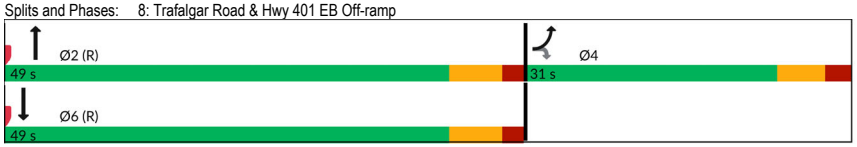
c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	325	0	871	901	0
Future Volume (vph)	147	325	0	871	901	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.921	0.850				
Flt Protected	0.977					
Satd. Flow (prot)	3288	1457	0	4520	4520	0
Flt Permitted	0.977					
Satd. Flow (perm)	3288	1457	0	4520	4520	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	113	113				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	325	0	871	901	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	310	162	0	871	901	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	11.3	11.3		54.7	54.7	
Actuated g/C Ratio	0.14	0.14		0.68	0.68	
v/c Ratio	0.55	0.53		0.28	0.29	
Control Delay (s/veh)	23.7	18.2		5.4	5.5	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	23.7	18.2		5.4	5.5	
LOS	C	B		A	A	
Approach Delay (s/veh)	21.8			5.4	5.5	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 42.5%		ICU Level of Service A	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	310	162	871	901
v/c Ratio	0.55	0.53	0.28	0.29
Control Delay (s/veh)	23.7	18.2	5.4	5.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.7	18.2	5.4	5.5
Queue Length 50th (m)	14.7	7.6	17.5	18.3
Queue Length 95th (m)	25.0	25.3	28.7	29.8
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	1065	516	3088	3088
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.31	0.28	0.29

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	325	0	871	901	0
Future Volume (vph)	147	325	0	871	901	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.92	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	3288	1457		4520	4520	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	3288	1457		4520	4520	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	325	0	871	901	0
RTOR Reduction (vph)	97	97	0	0	0	0
Lane Group Flow (vph)	213	65	0	871	901	0
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	11.3	11.3		54.7	54.7	
Effective Green, g (s)	11.3	11.3		54.7	54.7	
Actuated g/C Ratio	0.14	0.14		0.68	0.68	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	464	205		3090	3090	
v/s Ratio Prot	c0.06			0.19	c0.20	
v/s Ratio Perm		0.04				
v/c Ratio	0.46	0.32		0.28	0.29	
Uniform Delay, d1	31.5	30.9		5.0	5.0	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.9		0.2	0.2	
Delay (s)	32.3	31.8		5.2	5.2	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	32.1			5.2	5.2	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	10.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.32			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	42.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

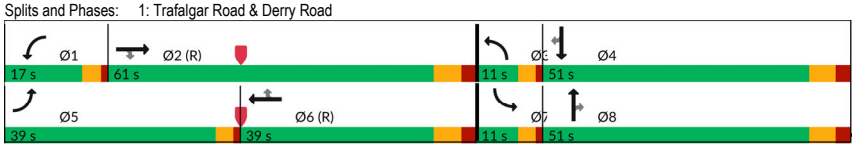
2041 Future Background

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	890	1667	335	280	543	125	141	887	197	79	752	62
Future Volume (vph)	890	1667	335	280	543	125	141	887	197	79	752	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			157			123			201			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	908	1701	342	286	554	128	144	905	201	81	767	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	908	1701	342	286	554	128	144	905	201	81	767	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	39.0	61.0	61.0	17.0	39.0	39.0	11.0	51.0	51.0	11.0	51.0	51.0
Total Split (%)	27.9%	43.6%	43.6%	12.1%	27.9%	27.9%	7.9%	36.4%	36.4%	7.9%	36.4%	36.4%
Maximum Green (s)	35.0	54.1	54.1	13.0	32.1	32.1	7.0	44.2	44.2	7.0	44.2	44.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	39.7	58.2	58.2	15.6	34.1	34.1	8.0	42.5	42.5	8.0	42.5	42.5
Actuated g/C Ratio	0.28	0.42	0.42	0.11	0.24	0.24	0.06	0.30	0.30	0.06	0.30	0.30
v/c Ratio	0.92	0.91	0.46	0.74	0.53	0.26	0.83	0.71	0.33	0.49	0.60	0.13
Control Delay (s/veh)	69.7	45.7	24.4	75.2	49.4	12.9	114.7	40.0	8.8	66.7	41.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.7	45.7	24.4	75.2	49.4	12.9	114.7	40.0	8.8	66.7	41.1	4.4
LOS	E	D	C	E	D	B	F	D	A	E	D	A
Approach Delay (s/veh)		50.6			52.2			43.6			40.8	
Approach LOS		D			D			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.92		
Intersection Signal Delay (s/veh): 48.0	Intersection LOS: D	
Intersection Capacity Utilization 79.8%	ICU Level of Service D	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	908	1701	342	286	554	128	144	905	201	81	767	63
v/c Ratio	0.92	0.91	0.46	0.74	0.53	0.26	0.83	0.71	0.33	0.49	0.60	0.13
Control Delay (s/veh)	69.7	45.7	24.4	75.2	49.4	12.9	114.7	40.0	8.8	66.7	41.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.7	45.7	24.4	75.2	49.4	12.9	114.7	40.0	8.8	66.7	41.1	4.4
Queue Length 50th (m)	140.4	167.9	44.7	36.5	69.2	2.1	23.1	55.6	6.3	12.7	80.7	1.7
Queue Length 95th (m)	m136.5	m158.3	m43.0	#64.0	84.0	12.3	#42.3	58.7	15.7	21.4	97.0	9.0
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	984	1879	750	386	1049	490	174	1377	651	166	1390	501
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.91	0.46	0.74	0.53	0.26	0.83	0.66	0.31	0.49	0.55	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	890	1667	335	280	543	125	141	887	197	79	752	62
Future Volume (vph)	890	1667	335	280	543	125	141	887	197	79	752	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	908	1701	342	286	554	128	144	905	201	81	767	63
RTOR Reduction (vph)	0	0	92	0	0	93	0	0	140	0	0	44
Lane Group Flow (vph)	908	1701	250	286	554	35	144	905	61	81	767	19
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	38.7	56.2	56.2	14.6	32.1	32.1	7.0	40.5	40.5	7.0	40.5	40.5
Effective Green, g (s)	39.7	58.2	58.2	15.6	34.1	34.1	8.0	42.5	42.5	8.0	42.5	42.5
Actuated g/C Ratio	0.28	0.42	0.42	0.11	0.24	0.24	0.06	0.30	0.30	0.06	0.30	0.30
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	984	1879	658	386	1049	397	174	1267	475	166	1279	384
v/s Ratio Prot	c0.26	c0.38		0.08	0.13		c0.05	c0.22		0.03	0.18	
v/s Ratio Perm			0.16			0.02			0.04			0.02
v/c Ratio	0.92	0.91	0.38	0.74	0.53	0.09	0.83	0.71	0.13	0.49	0.60	0.05
Uniform Delay, d1	48.7	38.3	28.4	60.2	46.0	40.9	65.3	43.4	35.3	64.0	41.5	34.5
Progression Factor	1.42	1.16	1.52	1.05	1.03	1.50	1.29	0.86	1.75	0.89	0.95	1.00
Incremental Delay, d2	1.7	0.8	0.2	8.5	1.8	0.4	26.8	2.2	0.2	4.5	1.1	0.1
Delay (s)	70.8	45.1	43.4	72.0	49.1	61.7	111.3	39.3	61.9	61.2	40.5	34.6
Level of Service	E	D	D	E	D	E	F	D	E	E	D	C
Approach Delay (s/veh)		52.8			57.5			51.2			41.9	
Approach LOS		D			E			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	51.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	79.8%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

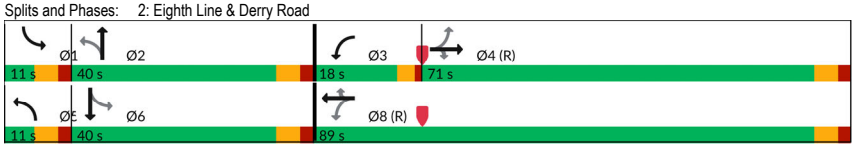
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1689	89	89	942	8	23	0	59	4	0	11
Future Volume (vph)	19	1689	89	89	942	8	23	0	59	4	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1555	0	1217	1420	0
Flt Permitted	0.243			0.068			0.478			0.717		
Satd. Flow (perm)	329	4520	1601	131	4391	1633	918	1555	0	918	1420	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		250			169	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Adj. Flow (vph)	20	1759	93	93	981	8	24	0	61	4	0	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1759	93	93	981	8	24	61	0	4	11	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.5	36.0	36.0	11.0	36.0		11.0	36.0	
Total Split (s)	71.0	71.0	71.0	18.0	89.0	89.0	11.0	40.0		11.0	40.0	
Total Split (%)	50.7%	50.7%	50.7%	12.9%	63.6%	63.6%	7.9%	28.6%		7.9%	28.6%	
Maximum Green (s)	65.0	65.0	65.0	14.0	83.0	83.0	5.0	34.0		5.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0		23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0			0	
Act Effct Green (s)	102.2	102.2	102.2	117.3	116.5	116.5	14.2	13.3		11.0	10.0	
Actuated g/C Ratio	0.73	0.73	0.73	0.84	0.83	0.83	0.10	0.10		0.08	0.07	
v/c Ratio	0.08	0.53	0.08	0.42	0.27	0.01	0.17	0.16		0.05	0.04	
Control Delay (s/veh)	6.7	15.2	3.0	12.2	4.0	0.0	51.3	5.3		51.5	0.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	6.7	15.2	3.0	12.2	4.0	0.0	51.3	5.3		51.5	0.3	
LOS	A	B	A	B	A	A	D	A		D	A	
Approach Delay (s/veh)		14.5			4.7			18.3			13.9	
Approach LOS		B			A			B			B	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 95		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.53		
Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B	
Intersection Capacity Utilization 59.2%	ICU Level of Service B	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	20	1759	93	93	981	8	24	61	4	11
v/c Ratio	0.08	0.53	0.08	0.42	0.27	0.01	0.17	0.16	0.05	0.04
Control Delay (s/veh)	6.7	15.2	3.0	12.2	4.0	0.0	51.3	5.3	51.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	6.7	15.2	3.0	12.2	4.0	0.0	51.3	5.3	51.5	0.3
Queue Length 50th (m)	2.4	155.0	4.1	2.9	18.5	0.0	6.8	0.0	1.5	0.0
Queue Length 95th (m)	m3.4	142.0	m6.9	15.9	42.9	0.0	16.2	3.1	6.2	0.0
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	240	3300	1196	279	3655	1371	143	566	85	472
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.53	0.08	0.33	0.27	0.01	0.17	0.11	0.05	0.02

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	1689	89	89	942	8	23	0	59	4	0	11
Future Volume (vph)	19	1689	89	89	942	8	23	0	59	4	0	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1555		1217	1420	
Flt Permitted	0.24	1.00	1.00	0.07	1.00	1.00	0.48	1.00		0.72	1.00	
Satd. Flow (perm)	329	4520	1601	131	4391	1633	919	1555		919	1420	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	20	1759	93	93	981	8	24	0	61	4	0	11
RTOR Reduction (vph)	0	0	29	0	0	2	0	56	0	0	10	0
Lane Group Flow (vph)	20	1759	64	93	981	6	24	5	0	4	1	0
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	96.2	96.2	96.2	109.3	109.3	109.3	16.8	11.3		8.6	7.2	
Effective Green, g (s)	96.2	96.2	96.2	109.3	109.3	109.3	16.8	11.3		8.6	7.2	
Actuated g/C Ratio	0.69	0.69	0.69	0.78	0.78	0.78	0.12	0.08		0.06	0.05	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	226	3105	1100	212	3428	1274	145	125		59	73	
v/s Ratio Prot		c0.39		c0.03	0.22		c0.01	0.00		0.00	0.00	
v/s Ratio Perm	0.06		0.04	0.31		0.00	c0.01			0.00		
v/c Ratio	0.09	0.57	0.06	0.44	0.29	0.00	0.17	0.04		0.07	0.01	
Uniform Delay, d1	7.3	11.2	7.1	9.3	4.3	3.4	55.0	59.3		61.9	63.0	
Progression Factor	0.65	1.40	1.77	1.00	1.00	1.00	0.94	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.5	0.1	1.5	0.2	0.0	0.5	0.1		0.5	0.0	
Delay (s)	5.3	16.3	12.7	10.8	4.5	3.4	52.1	59.5		62.4	63.1	
Level of Service	A	B	B	B	A	A	D	E		E	E	
Approach Delay (s/veh)		16.0			5.1			57.4			62.9	
Approach LOS		B			A			E			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	13.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0	
Intersection Capacity Utilization	59.2%	ICU Level of Service	B	
Analysis Period (min)	15			

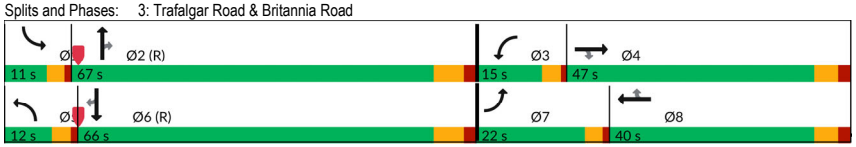
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	929	474	213	380	96	195	993	240	50	1475	101
Future Volume (vph)	202	929	474	213	380	96	195	993	240	50	1475	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			112			125			242			117
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	204	938	479	215	384	97	197	1003	242	51	1490	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	204	938	479	215	384	97	197	1003	242	51	1490	102
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	22.0	47.0	47.0	15.0	40.0	40.0	12.0	67.0	67.0	11.0	66.0	66.0
Total Split (%)	15.7%	33.6%	33.6%	10.7%	28.6%	28.6%	8.6%	47.9%	47.9%	7.9%	47.1%	47.1%
Maximum Green (s)	18.0	41.0	41.0	11.0	34.0	34.0	8.0	60.0	60.0	7.0	59.0	59.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	14.8	40.5	40.5	11.8	37.6	37.6	11.3	66.9	66.9	8.0	61.4	61.4
Actuated g/C Ratio	0.11	0.29	0.29	0.08	0.27	0.27	0.08	0.48	0.48	0.06	0.44	0.44
v/c Ratio	0.57	0.72	0.91	0.73	0.32	0.18	0.85	0.49	0.28	0.31	0.79	0.15
Control Delay (s/veh)	65.8	48.1	58.0	67.9	43.4	18.2	80.6	39.8	14.5	58.3	33.2	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.8	48.1	58.0	67.9	43.4	18.2	80.6	39.8	14.5	58.3	33.2	5.4
LOS	E	D	E	E	D	B	F	D	B	E	C	A
Approach Delay (s/veh)		53.3			47.5			41.1			32.2	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 42.9		Intersection LOS: D	
Intersection Capacity Utilization 74.8%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	204	938	479	215	384	97	197	1003	242	51	1490	102
v/c Ratio	0.57	0.72	0.91	0.73	0.32	0.18	0.85	0.49	0.28	0.31	0.79	0.15
Control Delay (s/veh)	65.8	48.1	58.0	67.9	43.4	18.2	80.6	39.8	14.5	58.3	33.2	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.8	48.1	58.0	67.9	43.4	18.2	80.6	39.8	14.5	58.3	33.2	5.4
Queue Length 50th (m)	29.2	97.2	103.9	30.8	40.6	4.9	~34.7	87.5	18.2	7.0	171.2	7.4
Queue Length 95th (m)	41.5	115.8	#166.7	#44.8	55.7	21.8	m#52.5	107.7	m31.8	m12.6	188.9	m16.5
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	457	1374	555	300	1210	536	231	2031	874	165	1882	663
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.68	0.86	0.72	0.32	0.18	0.85	0.49	0.28	0.31	0.79	0.15

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	929	474	213	380	96	195	993	240	50	1475	101
Future Volume (vph)	202	929	474	213	380	96	195	993	240	50	1475	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	204	938	479	215	384	97	197	1003	242	51	1490	102
RTOR Reduction (vph)	0	0	80	0	0	71	0	0	128	0	0	57
Lane Group Flow (vph)	204	938	399	215	384	26	197	1003	114	51	1490	45
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	13.8	38.6	38.6	10.8	35.6	35.6	10.3	64.0	64.0	5.6	59.3	59.3
Effective Green, g (s)	14.8	40.6	40.6	11.8	37.6	37.6	11.3	66.0	66.0	6.6	61.3	61.3
Actuated g/C Ratio	0.11	0.29	0.29	0.08	0.27	0.27	0.08	0.47	0.47	0.05	0.44	0.44
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	356	1298	450	295	1190	438	231	2005	738	136	1880	597
v/s Ratio Prot	0.06	0.21		c0.06	0.09		c0.07	0.24		0.02	c0.35	
v/s Ratio Perm			c0.26			0.02			0.07			0.03
v/c Ratio	0.57	0.72	0.89	0.73	0.32	0.06	0.85	0.50	0.15	0.38	0.79	0.07
Uniform Delay, d1	59.6	44.6	47.5	62.5	41.0	38.1	63.5	25.6	21.1	64.7	33.9	22.9
Progression Factor	1.00	1.00	1.00	0.85	1.04	6.01	0.93	1.49	5.14	0.85	0.88	1.73
Incremental Delay, d2	2.2	2.0	18.7	8.6	0.2	0.1	17.4	0.6	0.3	1.5	3.2	0.2
Delay (s)	61.8	46.7	66.2	62.0	42.8	228.7	76.2	38.8	108.7	56.3	32.9	39.7
Level of Service	E	D	E	E	D	F	E	D	F	E	C	D
Approach Delay (s/veh)		54.3			74.7			55.6			34.0	
Approach LOS		D			E			E			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	51.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	74.8%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

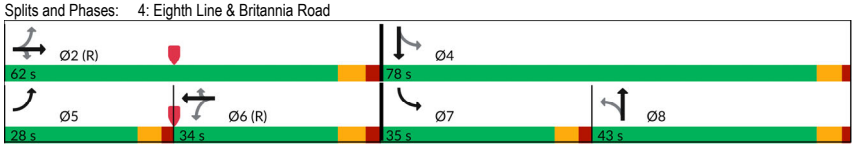
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	1097	13	25	646	18	19	50	28	38	102	23
Future Volume (vph)	28	1097	13	25	646	18	19	50	28	38	102	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.946			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1750	0	1825	1867	0
Flt Permitted	0.325			0.206			0.675			0.500		
Satd. Flow (perm)	624	4476	1306	396	4476	1633	1190	1750	0	961	1867	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		20			12	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	29	1119	13	26	659	18	19	51	29	39	104	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	1119	13	26	659	18	19	80	0	39	128	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	28.0	62.0	62.0	34.0	34.0	34.0	43.0	43.0		35.0	78.0	
Total Split (%)	20.0%	44.3%	44.3%	24.3%	24.3%	24.3%	30.7%	30.7%		25.0%	55.7%	
Maximum Green (s)	22.0	55.2	55.2	27.2	27.2	27.2	37.3	37.3		29.0	72.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	101.4	100.6	100.6	93.1	93.1	93.1	15.0	15.0		26.6	26.9	
Actuated g/C Ratio	0.72	0.72	0.72	0.67	0.67	0.67	0.11	0.11		0.19	0.19	
v/c Ratio	0.06	0.35	0.01	0.10	0.22	0.02	0.15	0.39		0.17	0.35	
Control Delay (s/veh)	20.2	28.9	3.8	12.9	10.8	0.0	75.2	63.7		43.9	43.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.2	28.9	3.8	12.9	10.8	0.0	75.2	63.7		43.9	43.0	
LOS	C	C	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		28.4			10.6			65.9			43.3	
Approach LOS		C			B			E			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.39		
Intersection Signal Delay (s/veh): 25.4		Intersection LOS: C
Intersection Capacity Utilization 61.9%		ICU Level of Service B
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	1119	13	26	659	18	19	80	39	128
v/c Ratio	0.06	0.35	0.01	0.10	0.22	0.02	0.15	0.39	0.17	0.35
Control Delay (s/veh)	20.2	28.9	3.8	12.9	10.8	0.0	75.2	63.7	43.9	43.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.2	28.9	3.8	12.9	10.8	0.0	75.2	63.7	43.9	43.0
Queue Length 50th (m)	5.8	110.7	0.0	2.8	33.2	0.0	4.5	13.5	9.3	30.0
Queue Length 95th (m)	m9.8	131.0	m0.6	8.0	44.2	0.0	m12.6	30.6	14.1	32.2
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	640	3215	957	263	2975	1123	317	480	383	969
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.35	0.01	0.10	0.22	0.02	0.06	0.17	0.10	0.13

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	1097	13	25	646	18	19	50	28	38	102	23
Future Volume (vph)	28	1097	13	25	646	18	19	50	28	38	102	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1750		1825	1867	
Flt Permitted	0.32	1.00	1.00	0.21	1.00	1.00	0.67	1.00		0.50	1.00	
Satd. Flow (perm)	624	4476	1306	396	4476	1633	1190	1750		960	1867	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	29	1119	13	26	659	18	19	51	29	39	104	24
RTOR Reduction (vph)	0	0	4	0	0	6	0	18	0	0	10	0
Lane Group Flow (vph)	29	1119	9	26	659	12	19	62	0	39	118	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	99.4	99.4	99.4	89.5	89.5	89.5	15.0	15.0		28.1	28.1	
Effective Green, g (s)	99.4	99.4	99.4	89.5	89.5	89.5	15.0	15.0		28.1	28.1	
Actuated g/C Ratio	0.71	0.71	0.71	0.64	0.64	0.64	0.11	0.11		0.20	0.20	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	476	3177	927	253	2861	1043	127	187		236	374	
v/s Ratio Prot	0.00	c0.25			0.15			0.04		0.01	c0.06	
v/s Ratio Perm	0.04		0.01	0.07		0.01	0.02			0.02		
v/c Ratio	0.06	0.35	0.01	0.10	0.23	0.01	0.15	0.33		0.17	0.32	
Uniform Delay, d1	6.2	7.9	5.9	9.7	10.7	9.2	56.7	57.9		45.8	47.8	
Progression Factor	3.05	3.61	1.00	1.00	1.00	1.00	1.27	1.32		0.95	0.94	
Incremental Delay, d2	0.0	0.3	0.0	0.8	0.2	0.0	0.5	1.0		0.3	0.5	
Delay (s)	19.1	28.6	5.9	10.6	10.9	9.2	72.4	77.6		44.1	45.5	
Level of Service	B	C	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		28.1			10.8			76.6			45.2	
Approach LOS		C			B			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	26.0	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.5	
Intersection Capacity Utilization	61.9%	ICU Level of Service	B	
Analysis Period (min)	15			

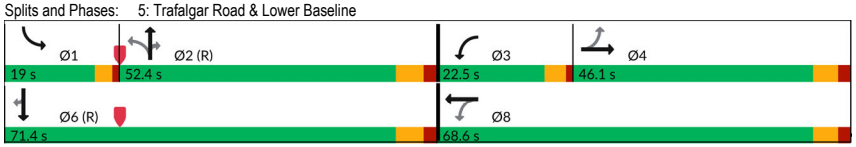
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	471	96	296	178	150	46	1178	213	393	1716	70
Future Volume (vph)	165	471	96	296	178	150	46	1178	213	393	1716	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt		0.975			0.931				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	1851	0	1789	1723	0	1631	4214	1551	3319	4295	1521
Flt Permitted	0.556			0.090			0.085			0.950		
Satd. Flow (perm)	1017	1851	0	170	1723	0	146	4214	1551	3319	4295	1521
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			40				173			60
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	172	491	100	308	185	156	46	1178	213	409	1788	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	172	591	0	308	341	0	46	1178	213	409	1788	73
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2		2			6
Detector Phase	4	4		3	8		2	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		25.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	24.2	24.2		11.5	24.2		31.6	31.6	31.6	11.0	31.6	31.6
Total Split (s)	46.1	46.1		22.5	68.6		52.4	52.4	52.4	19.0	71.4	71.4
Total Split (%)	32.9%	32.9%		16.1%	49.0%		37.4%	37.4%	37.4%	13.6%	51.0%	51.0%
Maximum Green (s)	39.9	39.9		18.0	62.4		45.8	45.8	45.8	15.0	64.8	64.8
Yellow Time (s)	4.2	4.2		3.5	4.2		4.6	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	2.0	2.0		1.0	2.0		2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	5.2	4.2		3.5	4.2		5.6	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lag	Lag		Lead			Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0							
Flash Don't Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	40.9	41.9		65.1	64.4		46.8	47.8	47.8	16.0	66.8	66.8
Actuated g/C Ratio	0.29	0.30		0.47	0.46		0.33	0.34	0.34	0.11	0.48	0.48
v/c Ratio	0.58	1.06		1.03	0.42		0.96	0.82	0.33	1.08	0.87	0.10
Control Delay (s/veh)	51.4	100.8		97.9	32.9		166.6	47.8	9.2	113.6	58.6	19.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.4	100.8		97.9	32.9		166.6	47.8	9.2	113.6	58.6	19.3
LOS	D	F		F	C		F	D	A	F	E	B
Approach Delay (s/veh)		89.7			63.8			45.9			67.2	
Approach LOS		F			E			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 64.1		Intersection LOS: E	
Intersection Capacity Utilization 116.3%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	172	591	308	341	46	1178	213	409	1788	73
v/c Ratio	0.58	1.06	1.03	0.42	0.96	0.82	0.33	1.08	0.87	0.10
Control Delay (s/veh)	51.4	100.8	97.9	32.9	166.6	47.8	9.2	113.6	58.6	19.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.4	100.8	97.9	32.9	166.6	47.8	9.2	113.6	58.6	19.3
Queue Length 50th (m)	42.3	~179.2	~76.2	69.8	13.1	130.9	7.7	~66.7	218.6	8.1
Queue Length 95th (m)	68.9	#252.1	#135.2	98.7	#41.6	153.6	27.1	m#97.2	237.7	m11.3
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	297	558	298	814	48	1438	643	379	2049	757
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	1.06	1.03	0.42	0.96	0.82	0.33	1.08	0.87	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	471	96	296	178	150	46	1178	213	393	1716	70
Future Volume (vph)	165	471	96	296	178	150	46	1178	213	393	1716	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	5.2	4.2		3.5	4.2		5.6	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	0.97		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1738	1851		1789	1723		1631	4214	1551	3319	4295	1521
Flt Permitted	0.56	1.00		0.09	1.00		0.09	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1017	1851		170	1723		147	4214	1551	3319	4295	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	172	491	100	308	185	156	46	1178	213	409	1788	73
RTOR Reduction (vph)	0	5	0	0	22	0	0	0	114	0	0	31
Lane Group Flow (vph)	172	586	0	308	319	0	46	1178	99	409	1788	42
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2		2			6
Actuated Green, G (s)	39.9	39.9		62.4	62.4		45.8	45.8	45.8	15.0	64.8	64.8
Effective Green, g (s)	40.9	41.9		63.4	64.4		46.8	47.8	47.8	16.0	66.8	66.8
Actuated g/C Ratio	0.29	0.30		0.45	0.46		0.33	0.34	0.34	0.11	0.48	0.48
Clearance Time (s)	6.2	6.2		4.5	6.2		6.6	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	297	553		296	792		49	1438	529	379	2049	725
v/s Ratio Prot		0.32		c0.14	0.19			0.28		c0.12	c0.42	
v/s Ratio Perm	0.17			c0.33			0.31		0.06			0.03
v/c Ratio	0.58	1.06		1.04	0.40		0.94	0.82	0.19	1.08	0.87	0.06
Uniform Delay, d1	42.2	49.1		44.5	25.1		45.2	42.1	32.4	62.0	32.8	19.7
Progression Factor	1.00	1.00		0.97	1.41		1.00	1.00	1.00	0.94	1.66	2.98
Incremental Delay, d2	4.3	55.1		61.9	0.7		111.6	5.3	0.8	59.5	3.5	0.1
Delay (s)	46.5	104.2		105.2	35.9		156.8	47.5	33.2	118.0	57.9	58.8
Level of Service	D	F		F	D		F	D	C	F	E	E
Approach Delay (s/veh)		91.2			68.8			48.9			68.8	
Approach LOS		F			E			D			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	66.5	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.01			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	116.3%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

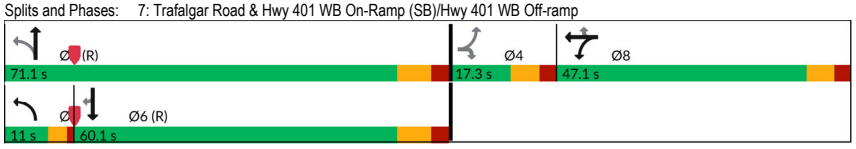
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	184	6	280	12	435	0	0	1116	117
Future Volume (vph)	0	0	6	184	6	280	12	435	0	0	1116	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1633	2879	1921	2456	1825	3941	0	0	4309	1276
Flt Permitted				0.950			0.182					
Satd. Flow (perm)	1883	0	1633	2879	1921	2456	350	3941	0	0	4309	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			286			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Adj. Flow (vph)	0	0	6	184	6	280	12	435	0	0	1116	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	6	184	6	280	12	435	0	0	1116	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	13.3	13.3	13.3	107.6	103.5			99.1	99.1
Actuated g/C Ratio			0.07	0.10	0.10	0.10	0.79	0.76			0.73	0.73
v/c Ratio			0.02	0.65	0.03	0.57	0.03	0.14			0.35	0.12
Control Delay (s/veh)			0.0	69.5	53.5	10.7	5.3	5.3			8.8	2.1
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.0	69.5	53.5	10.7	5.3	5.3			8.8	2.1
LOS			A	E	D	B	A	A			A	A
Approach Delay (s/veh)					34.3			5.3			8.2	
Approach LOS					C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 13.2		Intersection LOS: B	
Intersection Capacity Utilization 57.0%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	6	184	6	280	12	435	1116	117
v/c Ratio	0.02	0.65	0.03	0.57	0.03	0.14	0.35	0.12
Control Delay (s/veh)	0.0	69.5	53.5	10.7	5.3	5.3	8.8	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.0	69.5	53.5	10.7	5.3	5.3	8.8	2.1
Queue Length 50th (m)	0.0	29.4	1.5	0.0	0.5	10.9	31.1	0.0
Queue Length 95th (m)	0.0	42.8	5.8	15.9	3.2	28.1	90.7	9.6
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	385	849	567	922	354	3010	3151	966
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.22	0.01	0.30	0.03	0.14	0.35	0.12

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	184	6	280	12	435	0	0	1116	117
Future Volume (vph)	0	0	6	184	6	280	12	435	0	0	1116	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3941			4309	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.18	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	350	3941			4309	1276
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	6	184	6	280	12	435	0	0	1116	117
RTOR Reduction (vph)	0	0	6	0	0	253	0	0	0	0	0	39
Lane Group Flow (vph)	0	0	0	184	6	27	12	435	0	0	1116	78
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	13.3	13.3	13.3	97.7	97.7			90.9	90.9
Effective Green, g (s)			2.0	13.3	13.3	13.3	97.7	97.7			90.9	90.9
Actuated g/C Ratio			0.01	0.10	0.10	0.10	0.72	0.72			0.67	0.67
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	282	188	241	282	2841			2890	856
v/s Ratio Prot				c0.06	0.00		0.00	c0.11			c0.26	
v/s Ratio Perm			c0.00			0.01	0.03					0.06
v/c Ratio			0.00	0.65	0.03	0.11	0.04	0.15			0.39	0.09
Uniform Delay, d1			65.8	58.9	55.3	55.7	5.8	5.9			9.9	7.8
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	4.1	0.0	0.1	0.0	0.1			0.4	0.2
Delay (s)			65.8	63.0	55.3	55.8	5.8	6.0			10.3	8.0
Level of Service			E	E	E	E	A	A			B	A
Approach Delay (s/veh)		65.8			58.6			6.0			10.1	
Approach LOS		E			E			A			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	20.0	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.41				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)		26.5	
Intersection Capacity Utilization	57.0%	ICU Level of Service		B	
Analysis Period (min)	15				
c Critical Lane Group					

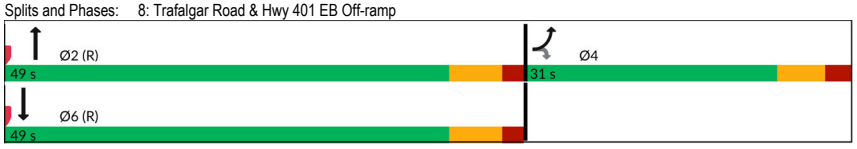
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	427	0	694	551	0
Future Volume (vph)	114	427	0	694	551	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.902	0.850				
Flt Protected	0.983					
Satd. Flow (prot)	2810	1339	0	4154	4117	0
Flt Permitted	0.983					
Satd. Flow (perm)	2810	1339	0	4154	4117	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	214	213				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Adj. Flow (vph)	114	427	0	694	551	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	328	213	0	694	551	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	11.2	11.2		54.8	54.8	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
v/c Ratio	0.57	0.58		0.24	0.20	
Control Delay (s/veh)	15.5	11.4		5.2	5.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	15.5	11.4		5.2	5.0	
LOS	B	B		A	A	
Approach Delay (s/veh)	13.9			5.2	5.0	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 7.8		Intersection LOS: A	
Intersection Capacity Utilization 49.8%		ICU Level of Service A	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	328	213	694	551
v/c Ratio	0.57	0.58	0.24	0.20
Control Delay (s/veh)	15.5	11.4	5.2	5.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.5	11.4	5.2	5.0
Queue Length 50th (m)	10.3	0.0	14.3	11.0
Queue Length 95th (m)	22.8	20.3	25.0	19.7
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	992	550	2846	2820
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.33	0.39	0.24	0.20

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	427	0	694	551	0
Future Volume (vph)	114	427	0	694	551	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2810	1339		4154	4117	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2810	1339		4154	4117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	427	0	694	551	0
RTOR Reduction (vph)	184	183	0	0	0	0
Lane Group Flow (vph)	144	30	0	694	551	0
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	11.2	11.2		54.8	54.8	
Effective Green, g (s)	11.2	11.2		54.8	54.8	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	393	187		2845	2820	
v/s Ratio Prot	c0.05			c0.17	0.13	
v/s Ratio Perm		0.02				
v/c Ratio	0.37	0.16		0.24	0.20	
Uniform Delay, d1	31.2	30.3		4.8	4.6	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.2	0.2	
Delay (s)	31.8	30.7		5.0	4.7	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	31.3			5.0	4.7	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

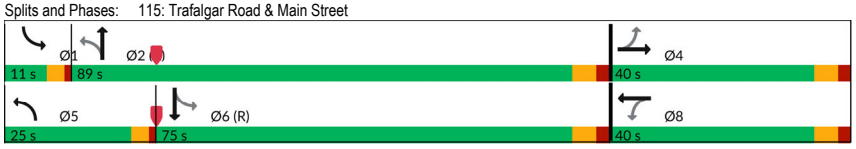
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	82	212	54	305	53	44	1346	31	31	891	52
Future Volume (vph)	84	82	212	54	305	53	44	1346	31	31	891	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.892			0.978			0.997			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3192	0	1789	3500	0	1711	4408	0	1711	4386	0
Flt Permitted	0.332			0.428			0.233			0.130		
Satd. Flow (perm)	625	3192	0	806	3500	0	420	4408	0	234	4386	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		214			13			4			8	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	85	83	214	55	308	54	44	1360	31	31	900	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	297	0	55	362	0	44	1391	0	31	953	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	21.2	21.2		21.2	21.2		106.4	100.2		105.8	98.2	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.76	0.72		0.76	0.70	
v/c Ratio	0.90	0.45		0.45	0.67		0.12	0.44		0.12	0.31	
Control Delay (s/veh)	126.9	16.9		64.4	59.7		8.1	18.8		4.5	7.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	126.9	16.9		64.4	59.7		8.1	18.8		4.5	7.8	
LOS	F	B		E	E		A	B		A	A	
Approach Delay (s/veh)		41.4			60.3			18.4			7.7	
Approach LOS		D			E			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 23.3		Intersection LOS: C	
Intersection Capacity Utilization 69.3%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	85	297	55	362	44	1391	31	953
v/c Ratio	0.90	0.45	0.45	0.67	0.12	0.44	0.12	0.31
Control Delay (s/veh)	126.9	16.9	64.4	59.7	8.1	18.8	4.5	7.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	126.9	16.9	64.4	59.7	8.1	18.8	4.5	7.8
Queue Length 50th (m)	24.1	11.0	14.5	50.0	4.5	128.2	0.9	39.1
Queue Length 95th (m)	#46.1	22.9	26.9	61.7	m4.9	m151.0	2.4	61.0
Internal Link Dist (m)		882.8		603.0		688.8		212.3
Turn Bay Length (m)	60.0		90.0		50.0		50.0	
Base Capacity (vph)	151	937	195	859	520	3156	251	3078
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.32	0.28	0.42	0.08	0.44	0.12	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	82	212	54	305	53	44	1346	31	31	891	52
Future Volume (vph)	84	82	212	54	305	53	44	1346	31	31	891	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.89		1.00	0.98		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3192		1789	3498		1711	4406		1711	4384	
Flt Permitted	0.33	1.00		0.43	1.00		0.23	1.00		0.13	1.00	
Satd. Flow (perm)	625	3192		806	3498		419	4406		233	4384	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	85	83	214	55	308	54	44	1360	31	31	900	53
RTOR Reduction (vph)	0	182	0	0	11	0	0	1	0	0	2	0
Lane Group Flow (vph)	85	115	0	55	351	0	44	1390	0	31	951	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	21.2	21.2		21.2	21.2		104.1	98.6		101.5	97.3	
Effective Green, g (s)	21.2	21.2		21.2	21.2		104.1	98.6		101.5	97.3	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.74	0.70		0.73	0.70	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	94	483		122	529		362	3103		213	3046	
v/s Ratio Prot		0.04			0.10		c0.00	c0.32		0.00	0.22	
v/s Ratio Perm	c0.14			0.07			0.09			0.10		
v/c Ratio	0.90	0.24		0.45	0.66		0.12	0.45		0.15	0.31	
Uniform Delay, d1	58.4	52.3		54.1	56.0		4.9	8.9		6.0	8.3	
Progression Factor	1.00	1.00		1.00	1.00		1.67	1.93		0.74	0.85	
Incremental Delay, d2	62.2	0.3		2.6	3.1		0.1	0.3		0.3	0.3	
Delay (s)	120.6	52.6		56.7	59.2		8.3	17.6		4.8	7.3	
Level of Service	F	D		E	E		A	B		A	A	
Approach Delay (s/veh)		67.7			58.8			17.3			7.3	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay (s/veh)	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		

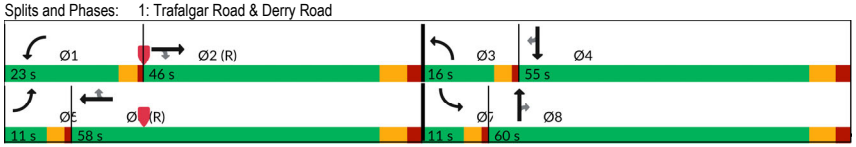
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
Future Volume (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			200			123			158			155
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
Shared Lane Traffic (%)												
Lane Group Flow (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	11.0	46.0	46.0	23.0	58.0	58.0	16.0	60.0	60.0	11.0	55.0	55.0
Total Split (%)	7.9%	32.9%	32.9%	16.4%	41.4%	41.4%	11.4%	42.9%	42.9%	7.9%	39.3%	39.3%
Maximum Green (s)	7.0	39.1	39.1	19.0	51.1	51.1	12.0	53.2	53.2	7.0	48.2	48.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	12.0	47.1	47.1	18.6	53.7	53.7	13.0	50.6	50.6	8.0	45.6	45.6
Actuated g/C Ratio	0.09	0.34	0.34	0.13	0.38	0.38	0.09	0.36	0.36	0.06	0.33	0.33
v/c Ratio	0.69	0.57	0.33	0.63	1.03	0.12	1.31	0.72	0.25	0.45	0.48	0.72
Control Delay (s/veh)	83.2	36.6	5.5	59.1	63.6	2.0	195.5	29.1	10.2	82.2	26.9	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.2	36.6	5.5	59.1	63.6	2.0	195.5	29.1	10.2	82.2	26.9	20.4
LOS	F	D	A	E	E	A	F	C	B	F	C	C
Approach Delay (s/veh)		38.6			60.7			65.6			28.3	
Approach LOS		D			E			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.31			
Intersection Signal Delay (s/veh): 51.4		Intersection LOS: D	
Intersection Capacity Utilization 84.6%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
v/c Ratio	0.69	0.57	0.33	0.63	1.03	0.12	1.31	0.72	0.25	0.45	0.48	0.72
Control Delay (s/veh)	83.2	36.6	5.5	59.1	63.6	2.0	195.5	29.1	10.2	82.2	26.9	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.2	36.6	5.5	59.1	63.6	2.0	195.5	29.1	10.2	82.2	26.9	20.4
Queue Length 50th (m)	31.2	81.0	2.2	34.7	~222.5	0.7	~73.2	116.4	21.5	10.2	65.4	74.0
Queue Length 95th (m)	#59.4	107.6	15.1	50.7	#266.9	m4.4	#102.4	144.6	36.9	21.8	36.5	37.9
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	289	1505	660	500	1751	689	294	1677	713	183	1525	660
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.57	0.33	0.58	1.03	0.12	1.31	0.66	0.24	0.45	0.44	0.67

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
Future Volume (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	198	865	216	292	1809	82	384	1111	169	82	669	440
RTOR Reduction (vph)	0	0	133	0	0	51	0	0	101	0	0	105
Lane Group Flow (vph)	198	865	83	292	1809	31	384	1111	68	82	669	335
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.0	45.1	45.1	17.6	51.7	51.7	12.0	48.6	48.6	7.0	43.6	43.6
Effective Green, g (s)	12.0	47.1	47.1	18.6	53.7	53.7	13.0	50.6	50.6	8.0	45.6	45.6
Actuated g/C Ratio	0.09	0.34	0.34	0.13	0.38	0.38	0.09	0.36	0.36	0.06	0.33	0.33
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	289	1505	528	465	1751	614	294	1537	565	183	1385	510
v/s Ratio Prot	c0.06	0.19		0.08	c0.40		c0.12	c0.26		0.03	0.16	
v/s Ratio Perm			0.05			0.02			0.04			0.21
v/c Ratio	0.69	0.57	0.16	0.63	1.03	0.05	1.31	0.72	0.12	0.45	0.48	0.66
Uniform Delay, d1	62.2	38.2	32.6	57.4	43.1	27.1	63.5	38.6	29.8	63.9	37.8	40.5
Progression Factor	1.18	0.89	0.68	0.94	0.81	1.41	0.76	0.70	1.92	1.18	0.69	0.55
Incremental Delay, d2	7.8	1.5	0.6	3.1	28.6	0.1	156.3	1.7	0.2	3.1	0.5	3.5
Delay (s)	80.9	35.4	22.7	57.0	63.6	38.3	204.6	28.6	57.5	78.2	26.6	26.0
Level of Service	F	D	C	E	E	D	F	C	E	E	C	C
Approach Delay (s/veh)		40.3			61.7			72.2			30.0	
Approach LOS		D			E			E			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	54.2	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	84.6%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

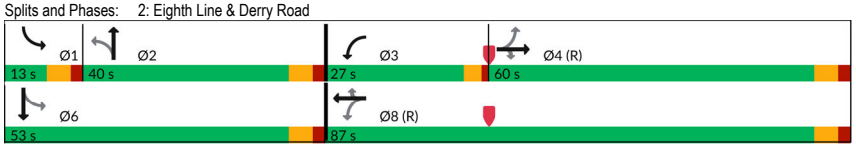
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1003	31	70	2132	4	56	0	71	4	5	8
Future Volume (vph)	4	1003	31	70	2132	4	56	0	71	4	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.908	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1633	0	1825	1744	0
Flt Permitted	0.051			0.213			0.749			0.471		
Satd. Flow (perm)	98	4520	1555	409	4565	1633	1439	1633	0	905	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		408			7	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	4	1003	31	70	2132	4	56	0	71	4	5	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	1003	31	70	2132	4	56	71	0	4	13	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		11.0	36.0	
Total Split (s)	60.0	60.0	60.0	27.0	87.0	87.0	40.0	40.0		13.0	53.0	
Total Split (%)	42.9%	42.9%	42.9%	19.3%	62.1%	62.1%	28.6%	28.6%		9.3%	37.9%	
Maximum Green (s)	54.0	54.0	54.0	23.0	81.0	81.0	34.0	34.0		7.0	47.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0			0	
Act Effct Green (s)	105.0	105.0	105.0	115.7	113.7	113.7	11.8	11.8		14.3	14.3	
Actuated g/C Ratio	0.75	0.75	0.75	0.83	0.81	0.81	0.08	0.08		0.10	0.10	
v/c Ratio	0.05	0.30	0.03	0.17	0.58	0.00	0.46	0.14		0.03	0.07	
Control Delay (s/veh)	14.5	15.2	2.8	4.0	6.1	0.0	50.1	2.0		51.5	35.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	14.5	15.2	2.8	4.0	6.1	0.0	50.1	2.0		51.5	35.6	
LOS	B	B	A	A	A	A	D	A		D	D	
Approach Delay (s/veh)		14.9			6.1			23.2			39.4	
Approach LOS		B			A			C			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 95		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.58		
Intersection Signal Delay (s/veh): 9.6	Intersection LOS: A	
Intersection Capacity Utilization 77.9%	ICU Level of Service D	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	4	1003	31	70	2132	4	56	71	4	13
v/c Ratio	0.05	0.30	0.03	0.17	0.58	0.00	0.46	0.14	0.03	0.07
Control Delay (s/veh)	14.5	15.2	2.8	4.0	6.1	0.0	50.1	2.0	51.5	35.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.5	15.2	2.8	4.0	6.1	0.0	50.1	2.0	51.5	35.6
Queue Length 50th (m)	0.8	101.4	0.3	2.3	59.6	0.0	9.6	0.3	1.0	1.6
Queue Length 95th (m)	m2.0	93.6	5.2	9.2	135.4	0.0	30.7	6.6	4.3	7.3
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	73	3391	1191	570	3706	1339	349	705	138	590
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.30	0.03	0.12	0.58	0.00	0.16	0.10	0.03	0.02

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	1003	31	70	2132	4	56	0	71	4	5	8
Future Volume (vph)	4	1003	31	70	2132	4	56	0	71	4	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1633		1825	1744	
Flt Permitted	0.05	1.00	1.00	0.21	1.00	1.00	0.75	1.00		0.47	1.00	
Satd. Flow (perm)	97	4520	1555	410	4565	1633	1439	1633		905	1744	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	1003	31	70	2132	4	56	0	71	4	5	8
RTOR Reduction (vph)	0	0	9	0	0	1	0	65	0	0	6	0
Lane Group Flow (vph)	4	1003	22	70	2132	3	56	6	0	4	7	0
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	99.5	99.5	99.5	108.9	108.9	108.9	11.8	11.8		19.1	19.1	
Effective Green, g (s)	99.5	99.5	99.5	108.9	108.9	108.9	11.8	11.8		19.1	19.1	
Actuated g/C Ratio	0.71	0.71	0.71	0.78	0.78	0.78	0.08	0.08		0.14	0.14	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	68	3212	1105	373	3550	1270	121	137		132	237	
v/s Ratio Prot		0.22		0.01	c0.47			0.00		0.00	c0.00	
v/s Ratio Perm	0.04		0.01	0.14		0.00	c0.04			0.00		
v/c Ratio	0.06	0.31	0.02	0.19	0.60	0.00	0.46	0.04		0.03	0.03	
Uniform Delay, d1	6.1	7.5	5.9	4.0	6.5	3.5	61.1	58.9		52.4	52.4	
Progression Factor	1.51	2.26	1.00	1.00	1.00	1.00	0.63	1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.2	0.0	0.2	0.8	0.0	2.8	0.1		0.1	0.1	
Delay (s)	10.8	17.2	6.0	4.3	7.2	3.5	41.0	59.0		52.5	52.5	
Level of Service	B	B	A	A	A	A	D	E		D	D	
Approach Delay (s/veh)		16.9			7.1			51.1			52.5	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	12.0	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.60			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0	
Intersection Capacity Utilization	77.9%	ICU Level of Service	D	
Analysis Period (min)	15			

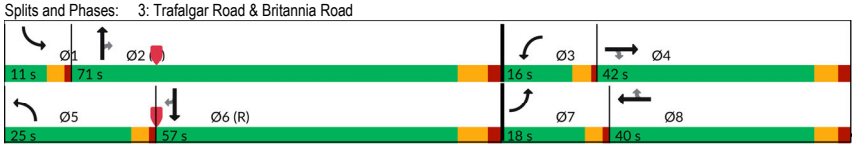
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
Future Volume (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			247			125			166			215
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	18.0	42.0	42.0	16.0	40.0	40.0	25.0	71.0	71.0	11.0	57.0	57.0
Total Split (%)	12.9%	30.0%	30.0%	11.4%	28.6%	28.6%	17.9%	50.7%	50.7%	7.9%	40.7%	40.7%
Maximum Green (s)	14.0	36.0	36.0	12.0	34.0	34.0	21.0	64.0	64.0	7.0	50.0	50.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	12.6	35.2	35.2	12.2	34.7	34.7	24.7	69.1	69.1	8.5	53.0	53.0
Actuated g/C Ratio	0.09	0.25	0.25	0.09	0.25	0.25	0.18	0.49	0.49	0.06	0.38	0.38
v/c Ratio	0.52	0.62	0.42	0.57	0.82	0.24	0.89	0.65	0.23	0.50	0.66	0.39
Control Delay (s/veh)	67.4	48.9	6.9	62.3	48.4	7.8	58.9	43.9	18.1	92.8	24.9	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.4	48.9	6.9	62.3	48.4	7.8	58.9	43.9	18.1	92.8	24.9	6.3
LOS	E	D	A	E	D	A	E	D	B	F	C	A
Approach Delay (s/veh)		41.8			46.6			45.1			25.7	
Approach LOS		D			D			D			C	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay (s/veh): 40.0	Intersection LOS: D	
Intersection Capacity Utilization 73.1%	ICU Level of Service D	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
v/c Ratio	0.52	0.62	0.42	0.57	0.82	0.24	0.89	0.65	0.23	0.50	0.66	0.39
Control Delay (s/veh)	67.4	48.9	6.9	62.3	48.4	7.8	58.9	43.9	18.1	92.8	24.9	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.4	48.9	6.9	62.3	48.4	7.8	58.9	43.9	18.1	92.8	24.9	6.3
Queue Length 50th (m)	22.3	72.7	0.0	24.3	101.1	6.1	76.3	133.5	21.1	13.2	99.7	28.1
Queue Length 95th (m)	34.4	88.0	20.6	29.3	121.3	24.7	m74.5	m129.5	m20.6	22.9	107.2	27.4
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	327	1214	610	328	1183	492	564	2140	857	189	1626	714
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.58	0.40	0.53	0.78	0.24	0.89	0.65	0.23	0.50	0.66	0.39

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
Future Volume (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	143	700	247	175	926	116	504	1391	194	94	1078	281
RTOR Reduction (vph)	0	0	185	0	0	87	0	0	84	0	0	134
Lane Group Flow (vph)	143	700	62	175	926	29	504	1391	110	94	1078	147
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.6	33.2	33.2	11.2	32.8	32.8	23.7	67.1	67.1	7.5	50.9	50.9
Effective Green, g (s)	12.6	35.2	35.2	12.2	34.8	34.8	24.7	69.1	69.1	8.5	52.9	52.9
Actuated g/C Ratio	0.09	0.25	0.25	0.09	0.25	0.25	0.18	0.49	0.49	0.06	0.38	0.38
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	274	1125	398	308	1134	383	565	2140	772	189	1622	580
v/s Ratio Prot	0.05	0.16		c0.05	c0.20		c0.16	c0.32		0.03	0.25	
v/s Ratio Perm			0.04			0.02			0.07			0.10
v/c Ratio	0.52	0.62	0.16	0.57	0.82	0.08	0.89	0.65	0.14	0.50	0.66	0.25
Uniform Delay, d1	60.8	46.5	40.8	61.4	49.6	40.3	56.3	26.4	19.3	63.7	36.2	30.0
Progression Factor	1.00	1.00	1.00	0.90	0.85	1.18	1.00	1.61	3.96	1.31	0.63	0.59
Incremental Delay, d2	1.8	1.1	0.2	2.3	4.5	0.1	1.9	0.1	0.0	1.9	2.1	1.0
Delay (s)	62.6	47.6	41.0	57.4	46.5	47.7	58.5	42.6	76.4	85.6	24.7	18.6
Level of Service	E	D	D	E	D	D	E	D	E	F	C	B
Approach Delay (s/veh)		48.1			48.2			49.6			27.5	
Approach LOS		D			D			D			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	43.5	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.75			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	73.1%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

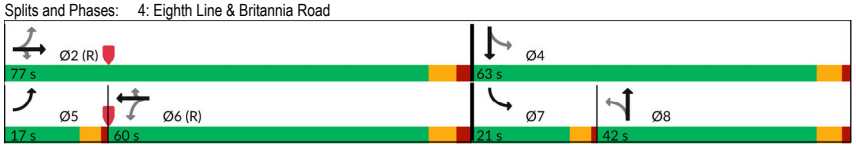
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	893	15	29	1141	29	39	79	45	23	43	42
Future Volume (vph)	18	893	15	29	1141	29	39	79	45	23	43	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.946			0.926	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1791	0	1825	1744	0
Flt Permitted	0.173			0.270			0.702			0.414		
Satd. Flow (perm)	332	4476	1328	519	4520	1633	1349	1791	0	795	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		20			42	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	18	893	15	29	1141	29	39	79	45	23	43	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	893	15	29	1141	29	39	124	0	23	85	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	17.0	77.0	77.0	60.0	60.0	60.0	42.0	42.0		21.0	63.0	
Total Split (%)	12.1%	55.0%	55.0%	42.9%	42.9%	42.9%	30.0%	30.0%		15.0%	45.0%	
Maximum Green (s)	12.5	70.2	70.2	53.2	53.2	53.2	36.3	36.3		16.5	57.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	106.2	103.9	103.9	99.6	99.6	99.6	16.0	16.0		24.8	23.6	
Actuated g/C Ratio	0.76	0.74	0.74	0.71	0.71	0.71	0.11	0.11		0.18	0.17	
v/c Ratio	0.06	0.27	0.02	0.08	0.35	0.02	0.25	0.56		0.12	0.26	
Control Delay (s/veh)	5.8	4.5	0.1	10.2	9.7	0.0	60.6	57.8		46.5	28.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.8	4.5	0.1	10.2	9.7	0.0	60.6	57.8		46.5	28.8	
LOS	A	A	A	B	A	A	E	E		D	C	
Approach Delay (s/veh)		4.5			9.4			58.4			32.5	
Approach LOS		A			A			E			C	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.56		
Intersection Signal Delay (s/veh): 11.9	Intersection LOS: B	
Intersection Capacity Utilization 61.9%	ICU Level of Service B	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	18	893	15	29	1141	29	39	124	23	85
v/c Ratio	0.06	0.27	0.02	0.08	0.35	0.02	0.25	0.56	0.12	0.26
Control Delay (s/veh)	5.8	4.5	0.1	10.2	9.7	0.0	60.6	57.8	46.5	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.8	4.5	0.1	10.2	9.7	0.0	60.6	57.8	46.5	28.8
Queue Length 50th (m)	0.9	19.2	0.0	2.1	45.0	0.0	10.0	27.3	5.6	11.9
Queue Length 95th (m)	m2.0	25.5	m0.0	8.2	80.8	0.0	m16.8	m41.8	13.2	26.8
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	385	3323	1000	369	3215	1188	349	479	262	738
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.27	0.02	0.08	0.35	0.02	0.11	0.26	0.09	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	893	15	29	1141	29	39	79	45	23	43	42
Future Volume (vph)	18	893	15	29	1141	29	39	79	45	23	43	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1791		1825	1743	
Flt Permitted	0.17	1.00	1.00	0.27	1.00	1.00	0.70	1.00		0.41	1.00	
Satd. Flow (perm)	332	4476	1328	518	4520	1633	1348	1791		795	1743	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	18	893	15	29	1141	29	39	79	45	23	43	42
RTOR Reduction (vph)	0	0	4	0	0	9	0	18	0	0	34	0
Lane Group Flow (vph)	18	893	11	29	1141	20	39	106	0	23	51	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	102.2	102.2	102.2	95.2	95.2	95.2	16.0	16.0		25.3	25.3	
Effective Green, g (s)	102.2	102.2	102.2	95.2	95.2	95.2	16.0	16.0		25.3	25.3	
Actuated g/C Ratio	0.73	0.73	0.73	0.68	0.68	0.68	0.11	0.11		0.18	0.18	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	269	3267	969	352	3073	1110	154	204		178	314	
v/s Ratio Prot	0.00	c0.20			c0.25			c0.06		0.00	c0.03	
v/s Ratio Perm	0.05		0.01	0.06		0.01	0.03			0.02		
v/c Ratio	0.07	0.27	0.01	0.08	0.37	0.02	0.25	0.52		0.13	0.16	
Uniform Delay, d1	5.9	6.4	5.1	7.6	9.6	7.3	56.6	58.4		47.8	48.4	
Progression Factor	0.96	0.67	1.00	1.00	1.00	1.00	1.01	1.00		1.03	1.07	
Incremental Delay, d2	0.1	0.2	0.0	0.5	0.3	0.0	0.8	2.1		0.3	0.2	
Delay (s)	5.7	4.5	5.2	8.1	9.9	7.3	58.0	60.6		49.4	52.0	
Level of Service	A	A	A	A	A	A	E	E		D	D	
Approach Delay (s/veh)		4.5			9.8			59.9			51.4	
Approach LOS		A			A			E			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	13.1	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	21.5	
Intersection Capacity Utilization	61.9%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

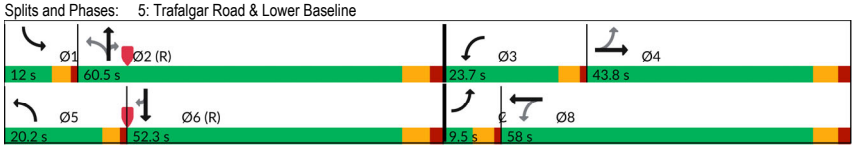
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	316	52	279	446	310	254	1797	319	221	1245	61
Future Volume (vph)	46	316	52	279	446	310	254	1797	319	221	1245	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt		0.979			0.938				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	1839	0	1807	1770	0	1745	4378	1581	3319	4295	1551
Flt Permitted	0.097			0.246			0.082			0.950		
Satd. Flow (perm)	179	1839	0	468	1770	0	151	4378	1581	3319	4295	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			29				186			157
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	46	316	52	279	446	310	254	1797	319	221	1245	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	368	0	279	756	0	254	1797	319	221	1245	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		7.0	10.0		7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2		11.5	24.2		11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	43.8		23.7	58.0		20.2	60.5	60.5	12.0	52.3	52.3
Total Split (%)	6.8%	31.3%		16.9%	41.4%		14.4%	43.2%	43.2%	8.6%	37.4%	37.4%
Maximum Green (s)	5.0	37.6		19.2	51.8		16.2	53.9	53.9	8.0	45.7	45.7
Yellow Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	48.0	41.3		64.0	55.7		69.5	55.9	55.9	9.0	47.7	47.7
Actuated g/C Ratio	0.34	0.30		0.46	0.40		0.50	0.40	0.40	0.06	0.34	0.34
v/c Ratio	0.36	0.67		0.71	1.05		0.94	1.03	0.43	1.04	0.85	0.10
Control Delay (s/veh)	30.9	50.5		46.3	93.8		78.7	70.2	13.9	119.6	78.1	6.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.9	50.5		46.3	93.8		78.7	70.2	13.9	119.6	78.1	6.5
LOS	C	D		D	F		E	E	B	F	E	A
Approach Delay (s/veh)		48.3			81.0			63.5			81.2	
Approach LOS		D			F			E			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 130		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.05		
Intersection Signal Delay (s/veh): 70.8	Intersection LOS: E	
Intersection Capacity Utilization 101.6%	ICU Level of Service G	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	368	279	756	254	1797	319	221	1245	61
v/c Ratio	0.36	0.67	0.71	1.05	0.94	1.03	0.43	1.04	0.85	0.10
Control Delay (s/veh)	30.9	50.5	46.3	93.8	78.7	70.2	13.9	119.6	78.1	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.9	50.5	46.3	93.8	78.7	70.2	13.9	119.6	78.1	6.5
Queue Length 50th (m)	7.2	91.6	68.5	~227.3	53.8	~226.2	24.7	~35.3	148.2	1.1
Queue Length 95th (m)	15.0	128.0	107.2	#315.5	#106.1	#260.2	50.1	#63.2	168.4	m4.6
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	128	546	407	722	270	1748	743	213	1463	631
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.67	0.69	1.05	0.94	1.03	0.43	1.04	0.85	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	316	52	279	446	310	254	1797	319	221	1245	61
Future Volume (vph)	46	316	52	279	446	310	254	1797	319	221	1245	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	0.98		1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1755	1838		1807	1771		1745	4378	1581	3319	4295	1551
Flt Permitted	0.10	1.00		0.25	1.00		0.08	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	179	1838		468	1771		151	4378	1581	3319	4295	1551
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	46	316	52	279	446	310	254	1797	319	221	1245	61
RTOR Reduction (vph)	0	4	0	0	17	0	0	0	113	0	0	41
Lane Group Flow (vph)	46	364	0	279	739	0	254	1797	206	221	1245	20
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2			6
Actuated Green, G (s)	44.2	40.2		62.2	53.7		65.0	53.0	53.0	8.0	44.8	44.8
Effective Green, g (s)	46.2	42.2		63.2	55.7		66.0	55.0	55.0	9.0	46.8	46.8
Actuated g/C Ratio	0.33	0.30		0.45	0.40		0.47	0.39	0.39	0.06	0.33	0.33
Clearance Time (s)	4.5	6.2		4.5	6.2		4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	115	554		388	704		267	1719	621	213	1435	518
v/s Ratio Prot	0.01	0.20		c0.09	c0.42		c0.12	c0.41		c0.07	0.29	
v/s Ratio Perm	0.12			0.23			0.33		0.13			0.01
v/c Ratio	0.40	0.66		0.72	1.05		0.95	1.05	0.33	1.04	0.87	0.04
Uniform Delay, d1	37.3	42.6		27.8	42.2		42.6	42.5	29.7	65.5	43.7	31.4
Progression Factor	1.00	1.00		1.56	1.38		1.00	1.00	1.00	0.85	1.69	1.00
Incremental Delay, d2	2.3	3.8		4.5	42.4		41.7	34.6	1.4	65.5	6.0	0.1
Delay (s)	39.6	46.4		47.9	100.6		84.3	77.1	31.1	121.3	79.8	31.6
Level of Service	D	D		D	F		F	E	C	F	E	C
Approach Delay (s/veh)		45.6			86.4			71.7			83.9	
Approach LOS		D			F			E			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	76.0	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.05			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	101.6%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

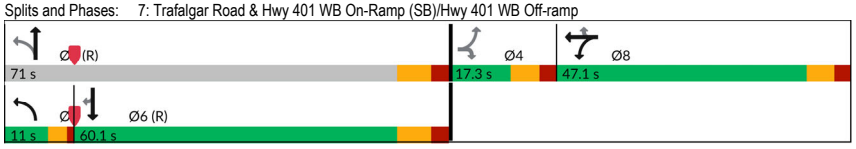
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	17	624	27	1396	7	868	0	0	720	45
Future Volume (vph)	17	0	17	624	27	1396	7	868	0	0	720	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	4309	0	0	4350	1306
Flt Permitted	0.597			0.950			0.178					
Satd. Flow (perm)	1147	0	1633	3372	1921	2737	342	4309	0	0	4350	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			345						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Adj. Flow (vph)	17	0	17	624	27	1396	7	868	0	0	720	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	17	624	27	1396	7	868	0	0	720	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.7		10.7	68.9	68.9	68.9	44.5	40.4			38.2	38.2
Actuated g/C Ratio	0.08		0.08	0.51	0.51	0.51	0.33	0.30			0.28	0.28
v/c Ratio	0.19		0.07	0.36	0.03	0.89	0.04	0.68			0.59	0.10
Control Delay (s/veh)	63.0		0.5	23.3	22.1	32.5	28.4	44.4			44.1	0.4
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.0		0.5	23.3	22.1	32.5	28.4	44.4			44.1	0.4
LOS	E		A	C	C	C	C	D			D	A
Approach Delay (s/veh)		31.8			29.6			44.2			41.5	
Approach LOS		C			C			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 135.5		
Actuated Cycle Length: 135.5		
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay (s/veh): 35.5	Intersection LOS: D	
Intersection Capacity Utilization 84.9%	ICU Level of Service E	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	17	624	27	1396	7	868	720	45
v/c Ratio	0.19	0.07	0.36	0.03	0.89	0.04	0.68	0.59	0.10
Control Delay (s/veh)	63.0	0.5	23.3	22.1	32.5	28.4	44.4	44.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.0	0.5	23.3	22.1	32.5	28.4	44.4	44.1	0.4
Queue Length 50th (m)	4.4	0.0	57.3	3.8	171.7	1.3	90.7	71.5	0.0
Queue Length 95th (m)	12.1	0.0	84.8	10.8	#264.3	4.3	99.4	90.5	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	90	248	1714	976	1560	188	2003	1669	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	0.36	0.03	0.89	0.04	0.43	0.43	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	17	624	27	1396	7	868	0	0	720	45
Future Volume (vph)	17	0	17	624	27	1396	7	868	0	0	720	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	4309			4350	1306
Flt Permitted	0.60		1.00	0.95	1.00	1.00	0.18	1.00			1.00	1.00
Satd. Flow (perm)	1147		1633	3372	1921	2737	343	4309			4350	1306
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	17	624	27	1396	7	868	0	0	720	45
RTOR Reduction (vph)	0	0	16	0	0	170	0	0	0	0	0	34
Lane Group Flow (vph)	17	0	1	624	27	1226	7	868	0	0	720	11
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.7		6.7	68.9	68.9	68.9	37.4	37.4			32.0	32.0
Effective Green, g (s)	6.7		6.7	68.9	68.9	68.9	37.4	37.4			32.0	32.0
Actuated g/C Ratio	0.05		0.05	0.51	0.51	0.51	0.28	0.28			0.24	0.24
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		80	1714	976	1391	109	1189			1027	308
v/s Ratio Prot				0.19	0.01		0.00	c0.20			0.17	
v/s Ratio Perm	c0.01		0.00			c0.45	0.02					0.01
v/c Ratio	0.30		0.01	0.36	0.03	0.88	0.06	0.73			0.70	0.03
Uniform Delay, d1	62.1		61.2	20.1	16.6	29.7	36.7	44.5			47.4	39.9
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.1		0.1	0.0	0.0	6.7	0.1	4.0			4.0	0.2
Delay (s)	65.2		61.3	20.1	16.6	36.4	36.8	48.4			51.4	40.1
Level of Service	E		E	C	B	D	D	D			D	D
Approach Delay (s/veh)		63.3			31.2			48.3			50.7	
Approach LOS		E			C			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	39.5	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.83				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5		
Intersection Capacity Utilization	84.9%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

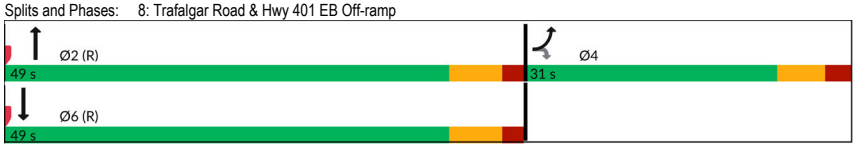
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	332	0	889	920	0
Future Volume (vph)	147	332	0	889	920	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.920	0.850				
Flt Protected	0.977					
Satd. Flow (prot)	2991	1327	0	4309	4350	0
Flt Permitted	0.977					
Satd. Flow (perm)	2991	1327	0	4309	4350	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	107	107				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Adj. Flow (vph)	147	332	0	889	920	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	313	166	0	889	920	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	12.0	12.0		54.0	54.0	
Actuated g/C Ratio	0.15	0.15		0.68	0.68	
v/c Ratio	0.58	0.57		0.31	0.31	
Control Delay (s/veh)	24.7	20.6		6.0	6.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	24.7	20.6		6.0	6.0	
LOS	C	C		A	A	
Approach Delay (s/veh)	23.3			6.0	6.0	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay (s/veh): 9.6		Intersection LOS: A	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	313	166	889	920
v/c Ratio	0.58	0.57	0.31	0.31
Control Delay (s/veh)	24.7	20.6	6.0	6.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.7	20.6	6.0	6.0
Queue Length 50th (m)	16.6	9.8	19.7	20.5
Queue Length 95th (m)	27.4	29.4	33.3	34.3
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	972	473	2907	2935
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.32	0.35	0.31	0.31

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	332	0	889	920	0
Future Volume (vph)	147	332	0	889	920	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.92	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2993	1327		4309	4350	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2993	1327		4309	4350	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	332	0	889	920	0
RTOR Reduction (vph)	91	91	0	0	0	0
Lane Group Flow (vph)	222	75	0	889	920	0
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	12.0	12.0		54.0	54.0	
Effective Green, g (s)	12.0	12.0		54.0	54.0	
Actuated g/C Ratio	0.15	0.15		0.68	0.68	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	448	199		2908	2936	
v/s Ratio Prot	c0.07			0.21	c0.21	
v/s Ratio Perm		0.06				
v/c Ratio	0.50	0.38		0.31	0.31	
Uniform Delay, d1	31.2	30.6		5.3	5.4	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	1.2		0.3	0.3	
Delay (s)	32.1	31.8		5.6	5.6	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	32.0			5.6	5.6	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

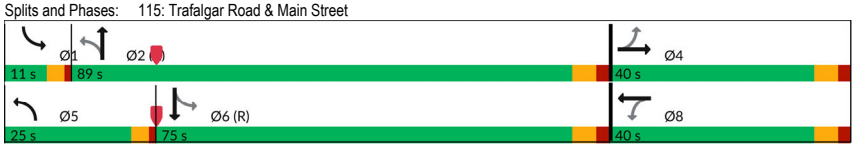
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	94	220	23	367	23	231	992	47	50	1189	321
Future Volume (vph)	63	94	220	23	367	23	231	992	47	50	1189	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.895			0.991			0.993			0.968	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3203	0	1789	3546	0	1711	4390	0	1711	4279	0
Flt Permitted	0.286			0.397			0.090			0.227		
Satd. Flow (perm)	539	3203	0	748	3546	0	162	4390	0	409	4279	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		220			4			8			53	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	63	94	220	23	367	23	231	992	47	50	1189	321
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	314	0	23	390	0	231	1039	0	50	1510	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	20.7	20.7		20.7	20.7		109.3	98.3		94.7	85.6	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.78	0.70		0.68	0.61	
v/c Ratio	0.80	0.48		0.21	0.74		0.72	0.34		0.15	0.57	
Control Delay (s/veh)	112.3	18.4		55.3	64.9		43.2	16.1		7.6	21.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	112.3	18.4		55.3	64.9		43.2	16.1		7.6	21.5	
LOS	F	B		E	E		D	B		A	C	
Approach Delay (s/veh)		34.1			64.4			21.0			21.0	
Approach LOS		C			E			C			C	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.80		
Intersection Signal Delay (s/veh): 27.3		Intersection LOS: C
Intersection Capacity Utilization 80.5%		ICU Level of Service D
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	63	314	23	390	231	1039	50	1510
v/c Ratio	0.80	0.48	0.21	0.74	0.72	0.34	0.15	0.57
Control Delay (s/veh)	112.3	18.4	55.3	64.9	43.2	16.1	7.6	21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	112.3	18.4	55.3	64.9	43.2	16.1	7.6	21.5
Queue Length 50th (m)	17.4	12.4	5.8	55.5	52.8	73.8	3.2	103.6
Queue Length 95th (m)	#38.1	25.6	14.3	70.1	80.8	36.5	9.0	177.2
Internal Link Dist (m)		882.8		603.0		688.8		212.3
Turn Bay Length (m)	60.0		90.0		50.0		50.0	
Base Capacity (vph)	130	944	181	864	370	3086	343	2637
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.33	0.13	0.45	0.62	0.34	0.15	0.57

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	94	220	23	367	23	231	992	47	50	1189	321
Future Volume (vph)	63	94	220	23	367	23	231	992	47	50	1189	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.89		1.00	0.99		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3202		1789	3547		1711	4391		1711	4280	
Flt Permitted	0.29	1.00		0.40	1.00		0.09	1.00		0.23	1.00	
Satd. Flow (perm)	538	3202		747	3547		161	4391		409	4280	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	63	94	220	23	367	23	231	992	47	50	1189	321
RTOR Reduction (vph)	0	187	0	0	3	0	0	2	0	0	21	0
Lane Group Flow (vph)	63	127	0	23	387	0	231	1037	0	50	1489	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.7	20.7		20.7	20.7		107.3	97.6		91.4	85.7	
Effective Green, g (s)	20.7	20.7		20.7	20.7		107.3	97.6		91.4	85.7	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.77	0.70		0.65	0.61	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	79	473		110	524		318	3061		320	2619	
v/s Ratio Prot		0.04			0.11		c0.09	0.24		0.01	0.35	
v/s Ratio Perm	c0.12			0.03			c0.46			0.10		
v/c Ratio	0.80	0.27		0.21	0.74		0.73	0.34		0.16	0.57	
Uniform Delay, d1	57.6	52.9		52.5	57.1		26.9	8.4		8.7	16.2	
Progression Factor	1.00	1.00		1.00	1.00		1.56	1.79		1.19	1.19	
Incremental Delay, d2	41.2	0.3		0.9	5.4		6.3	0.2		0.2	0.9	
Delay (s)	98.8	53.2		53.4	62.4		48.3	15.3		10.5	20.2	
Level of Service	F	D		D	E		D	B		B	C	
Approach Delay (s/veh)		60.8			61.9			21.3			19.9	
Approach LOS		E			E			C			B	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	29.4	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.75			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	80.5%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

2051 Future Background

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	908	1701	342	295	571	132	172	1082	241	83	783	65
Future Volume (vph)	908	1701	342	295	571	132	172	1082	241	83	783	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			151			123			200			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	927	1736	349	301	583	135	176	1104	246	85	799	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	927	1736	349	301	583	135	176	1104	246	85	799	66
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	44.0	64.4	64.4	18.0	38.4	38.4	13.0	46.6	46.6	11.0	44.6	44.6
Total Split (%)	31.4%	46.0%	46.0%	12.9%	27.4%	27.4%	9.3%	33.3%	33.3%	7.9%	31.9%	31.9%
Maximum Green (s)	40.0	57.5	57.5	14.0	31.5	31.5	9.0	39.8	39.8	7.0	37.8	37.8
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	40.8	59.5	59.5	15.0	33.7	33.7	10.0	41.8	41.8	8.0	39.8	39.8
Actuated g/C Ratio	0.29	0.43	0.43	0.11	0.24	0.24	0.07	0.30	0.30	0.06	0.28	0.28
v/c Ratio	0.92	0.90	0.46	0.81	0.56	0.28	0.81	0.89	0.41	0.51	0.67	0.15
Control Delay (s/veh)	69.5	36.1	18.2	81.8	46.0	11.5	108.8	45.3	10.0	67.2	44.6	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.5	36.1	18.2	81.8	46.0	11.5	108.8	45.3	10.0	67.2	44.6	4.6
LOS	E	D	B	F	D	B	F	D	B	E	D	A
Approach Delay (s/veh)		44.3			52.0			46.9			43.9	
Approach LOS		D			D			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green		
Natural Cycle: 120		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.92		
Intersection Signal Delay (s/veh): 46.1	Intersection LOS: D	
Intersection Capacity Utilization 84.1%	ICU Level of Service E	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	927	1736	349	301	583	135	176	1104	246	85	799	66
v/c Ratio	0.92	0.90	0.46	0.81	0.56	0.28	0.81	0.89	0.41	0.51	0.67	0.15
Control Delay (s/veh)	69.5	36.1	18.2	81.8	46.0	11.5	108.8	45.3	10.0	67.2	44.6	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.5	36.1	18.2	81.8	46.0	11.5	108.8	45.3	10.0	67.2	44.6	4.6
Queue Length 50th (m)	124.6	138.6	34.3	38.0	68.7	2.4	28.2	103.1	9.5	13.2	88.3	2.0
Queue Length 95th (m)	m105.4	m93.6	m27.2	#65.5	84.7	13.5	#47.9	107.4	20.2	20.5	107.4	10.1
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	1016	1921	760	371	1038	487	218	1246	607	166	1197	449
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.90	0.46	0.81	0.56	0.28	0.81	0.89	0.41	0.51	0.67	0.15

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	908	1701	342	295	571	132	172	1082	241	83	783	65
Future Volume (vph)	908	1701	342	295	571	132	172	1082	241	83	783	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	927	1736	349	301	583	135	176	1104	246	85	799	66
RTOR Reduction (vph)	0	0	87	0	0	93	0	0	140	0	0	47
Lane Group Flow (vph)	927	1736	262	301	583	42	176	1104	106	85	799	19
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	39.8	57.5	57.5	14.0	31.7	31.7	9.0	39.8	39.8	7.0	37.8	37.8
Effective Green, g (s)	40.8	59.5	59.5	15.0	33.7	33.7	10.0	41.8	41.8	8.0	39.8	39.8
Actuated g/C Ratio	0.29	0.43	0.43	0.11	0.24	0.24	0.07	0.30	0.30	0.06	0.28	0.28
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	1011	1921	673	371	1037	393	218	1246	467	166	1197	360
v/s Ratio Prot	c0.27	c0.38		0.09	0.14		c0.06	c0.26		0.03	0.19	
v/s Ratio Perm			0.17			0.03			0.07			0.01
v/c Ratio	0.92	0.90	0.39	0.81	0.56	0.11	0.81	0.89	0.23	0.51	0.67	0.05
Uniform Delay, d1	48.0	37.6	27.7	61.1	46.7	41.4	64.1	46.8	36.9	64.1	44.3	36.4
Progression Factor	1.42	0.93	1.15	1.07	0.93	1.13	1.36	0.79	0.96	0.88	0.94	1.00
Incremental Delay, d2	1.5	0.8	0.2	13.5	2.1	0.5	18.5	7.2	0.4	5.0	1.8	0.1
Delay (s)	69.7	35.8	31.9	78.9	45.7	47.1	105.8	44.1	35.8	61.4	43.3	36.5
Level of Service	E	D	C	E	D	D	F	D	D	E	D	D
Approach Delay (s/veh)		45.8			55.7			49.9			44.5	
Approach LOS		D			E			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	48.1	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.92			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	84.1%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

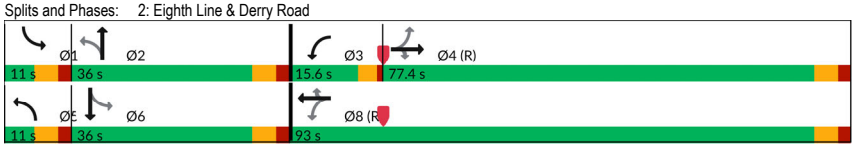
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1776	94	94	991	9	31	0	80	5	0	13
Future Volume (vph)	20	1776	94	94	991	9	31	0	80	5	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1555	0	1217	1420	0
Flt Permitted	0.229			0.056			0.510			0.703		
Satd. Flow (perm)	310	4520	1601	108	4391	1633	980	1555	0	900	1420	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		210			162	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Adj. Flow (vph)	21	1850	98	98	1032	9	32	0	83	5	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	1850	98	98	1032	9	32	83	0	5	14	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.5	36.0	36.0	11.0	36.0		11.0	36.0	
Total Split (s)	77.4	77.4	77.4	15.6	93.0	93.0	11.0	36.0		11.0	36.0	
Total Split (%)	55.3%	55.3%	55.3%	11.1%	66.4%	66.4%	7.9%	25.7%		7.9%	25.7%	
Maximum Green (s)	71.4	71.4	71.4	11.6	87.0	87.0	5.0	30.0		5.0	30.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0		23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0			0	
Act Effct Green (s)	98.3	98.3	98.3	113.8	111.8	111.8	15.5	13.5		11.9	10.0	
Actuated g/C Ratio	0.70	0.70	0.70	0.81	0.80	0.80	0.11	0.10		0.09	0.07	
v/c Ratio	0.10	0.58	0.08	0.48	0.29	0.01	0.20	0.24		0.06	0.06	
Control Delay (s/veh)	9.3	20.0	3.9	19.4	4.5	0.0	43.0	7.0		51.2	0.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	9.3	20.0	3.9	19.4	4.5	0.0	43.0	7.0		51.2	0.5	
LOS	A	B	A	B	A	A	D	A		D	A	
Approach Delay (s/veh)		19.0			5.8			17.1			13.8	
Approach LOS		B			A			B			B	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.58		
Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B
Intersection Capacity Utilization 61.2%		ICU Level of Service B
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	21	1850	98	98	1032	9	32	83	5	14
v/c Ratio	0.10	0.58	0.08	0.48	0.29	0.01	0.20	0.24	0.06	0.06
Control Delay (s/veh)	9.3	20.0	3.9	19.4	4.5	0.0	43.0	7.0	51.2	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.3	20.0	3.9	19.4	4.5	0.0	43.0	7.0	51.2	0.5
Queue Length 50th (m)	2.4	137.0	4.0	3.1	19.7	0.0	4.7	0.0	1.9	0.0
Queue Length 95th (m)	m3.6	246.6	m6.4	22.9	46.7	0.0	19.8	14.5	7.2	0.0
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	217	3173	1154	233	3506	1318	158	498	90	431
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.58	0.08	0.42	0.29	0.01	0.20	0.17	0.06	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1776	94	94	991	9	31	0	80	5	0	13
Future Volume (vph)	20	1776	94	94	991	9	31	0	80	5	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1555		1217	1420	
Flt Permitted	0.23	1.00	1.00	0.06	1.00	1.00	0.51	1.00		0.70	1.00	
Satd. Flow (perm)	310	4520	1601	108	4391	1633	980	1555		900	1420	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	21	1850	98	98	1032	9	32	0	83	5	0	14
RTOR Reduction (vph)	0	0	33	0	0	2	0	75	0	0	13	0
Lane Group Flow (vph)	21	1850	65	98	1032	7	32	8	0	5	1	0
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	93.5	93.5	93.5	107.0	107.0	107.0	19.3	13.5		10.7	9.2	
Effective Green, g (s)	93.5	93.5	93.5	107.0	107.0	107.0	19.3	13.5		10.7	9.2	
Actuated g/C Ratio	0.67	0.67	0.67	0.76	0.76	0.76	0.14	0.10		0.08	0.07	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	207	3018	1069	199	3355	1248	170	149		72	93	
v/s Ratio Prot		c0.41		c0.03	0.24		c0.01	0.01		0.00	0.00	
v/s Ratio Perm	0.07		0.04	0.34		0.00	c0.02			0.00		
v/c Ratio	0.10	0.61	0.06	0.49	0.31	0.01	0.19	0.05		0.07	0.01	
Uniform Delay, d1	8.3	13.1	8.1	13.8	5.1	3.9	53.0	57.4		60.0	61.1	
Progression Factor	0.86	1.61	2.03	1.00	1.00	1.00	0.77	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.6	0.1	1.9	0.2	0.0	0.5	0.1		0.4	0.0	
Delay (s)	7.8	21.7	16.4	15.7	5.3	3.9	41.3	57.6		60.4	61.2	
Level of Service	A	C	B	B	A	A	D	E		E	E	
Approach Delay (s/veh)		21.3			6.2			53.1			61.0	
Approach LOS		C			A			D			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	17.3	HCM 2000 Level of Service		B		
HCM 2000 Volume to Capacity ratio	0.56					
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		22.0		
Intersection Capacity Utilization	61.2%	ICU Level of Service		B		
Analysis Period (min)	15					

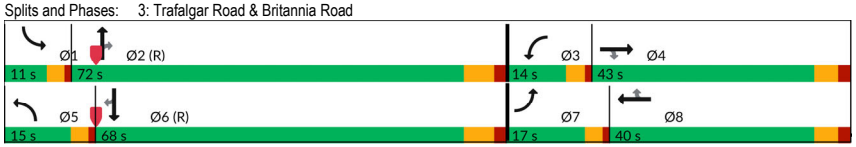
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	987	504	230	410	104	238	1211	293	61	1799	124
Future Volume (vph)	215	987	504	230	410	104	238	1211	293	61	1799	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103			105			255			125
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	217	997	509	232	414	105	240	1223	296	62	1817	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	217	997	509	232	414	105	240	1223	296	62	1817	125
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	17.0	43.0	43.0	14.0	40.0	40.0	15.0	72.0	72.0	11.0	68.0	68.0
Total Split (%)	12.1%	30.7%	30.7%	10.0%	28.6%	28.6%	10.7%	51.4%	51.4%	7.9%	48.6%	48.6%
Maximum Green (s)	13.0	37.0	37.0	10.0	34.0	34.0	11.0	65.0	65.0	7.0	61.0	61.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	13.4	39.0	39.0	11.0	36.6	36.6	12.0	69.2	69.2	8.0	63.0	63.0
Actuated g/C Ratio	0.10	0.28	0.28	0.08	0.26	0.26	0.09	0.49	0.49	0.06	0.45	0.45
v/c Ratio	0.67	0.80	1.00	0.84	0.36	0.21	0.98	0.58	0.33	0.38	0.94	0.18
Control Delay (s/veh)	72.0	52.6	80.9	83.5	34.1	6.8	106.2	37.5	15.0	66.5	44.5	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.0	52.6	80.9	83.5	34.1	6.8	106.2	37.5	15.0	66.5	44.5	4.8
LOS	E	D	F	F	C	A	F	D	B	E	D	A
Approach Delay (s/veh)		63.4			45.5			43.1			42.7	
Approach LOS		E			D			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green		
Natural Cycle: 115		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.00		
Intersection Signal Delay (s/veh): 48.9	Intersection LOS: D	
Intersection Capacity Utilization 83.4%	ICU Level of Service E	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	217	997	509	232	414	105	240	1223	296	62	1817	125
v/c Ratio	0.67	0.80	1.00	0.84	0.36	0.21	0.98	0.58	0.33	0.38	0.94	0.18
Control Delay (s/veh)	72.0	52.6	80.9	83.5	34.1	6.8	106.2	37.5	15.0	66.5	44.5	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	72.0	52.6	80.9	83.5	34.1	6.8	106.2	37.5	15.0	66.5	44.5	4.8
Queue Length 50th (m)	31.4	109.7	~124.7	25.0	41.6	6.7	40.4	105.8	21.9	8.3	221.1	9.0
Queue Length 95th (m)	45.7	130.0	#201.2	#50.3	54.3	21.2	m#62.6	m125.9	m39.2	m14.6	#250.2	m16.4
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	337	1246	507	275	1158	504	245	2102	903	165	1932	683
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	0.80	1.00	0.84	0.36	0.21	0.98	0.58	0.33	0.38	0.94	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	987	504	230	410	104	238	1211	293	61	1799	124
Future Volume (vph)	215	987	504	230	410	104	238	1211	293	61	1799	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	217	997	509	232	414	105	240	1223	296	62	1817	125
RTOR Reduction (vph)	0	0	74	0	0	78	0	0	130	0	0	69
Lane Group Flow (vph)	217	997	435	232	414	27	240	1223	166	62	1817	56
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.4	37.0	37.0	10.0	34.6	34.6	11.0	66.4	66.4	5.6	61.0	61.0
Effective Green, g (s)	13.4	39.0	39.0	11.0	36.6	36.6	12.0	68.4	68.4	6.6	63.0	63.0
Actuated g/C Ratio	0.10	0.28	0.28	0.08	0.26	0.26	0.09	0.49	0.49	0.05	0.45	0.45
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	322	1246	433	275	1158	426	245	2078	765	136	1932	614
v/s Ratio Prot	0.06	0.22		c0.07	0.09		c0.08	0.29		0.02	c0.42	
v/s Ratio Perm			c0.28			0.02			0.11			0.04
v/c Ratio	0.67	0.80	1.00	0.84	0.36	0.06	0.98	0.59	0.22	0.46	0.94	0.09
Uniform Delay, d1	61.2	46.9	50.5	63.7	42.1	38.8	63.9	25.7	20.5	65.0	36.7	22.1
Progression Factor	1.00	1.00	1.00	0.91	0.78	0.81	1.04	1.42	3.61	0.95	0.94	1.15
Incremental Delay, d2	5.5	3.8	44.2	20.1	0.2	0.1	40.1	0.8	0.4	2.2	9.7	0.3
Delay (s)	66.7	50.7	94.7	78.0	33.1	31.6	106.2	37.4	74.4	63.8	44.3	25.7
Level of Service	E	D	F	E	C	C	F	D	E	E	D	C
Approach Delay (s/veh)		65.7			46.8			53.0			43.7	
Approach LOS		E			D			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	52.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.95			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	83.4%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

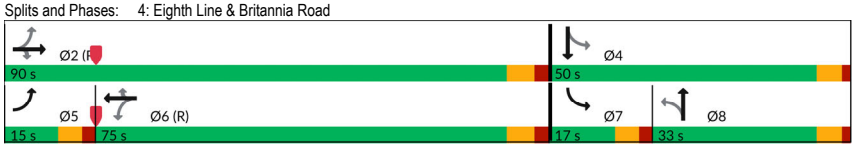
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1183	15	27	697	20	26	68	38	52	138	31
Future Volume (vph)	31	1183	15	27	697	20	26	68	38	52	138	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.946			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1750	0	1825	1867	0
Flt Permitted	0.301			0.186			0.647			0.425		
Satd. Flow (perm)	578	4476	1306	357	4476	1633	1140	1750	0	816	1867	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		18			9	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	32	1207	15	28	711	20	27	69	39	53	141	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	1207	15	28	711	20	27	108	0	53	174	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	15.0	90.0	90.0	75.0	75.0	75.0	33.0	33.0		17.0	50.0	
Total Split (%)	10.7%	64.3%	64.3%	53.6%	53.6%	53.6%	23.6%	23.6%		12.1%	35.7%	
Maximum Green (s)	9.0	83.2	83.2	68.2	68.2	68.2	27.3	27.3		11.0	44.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	100.2	99.4	99.4	91.8	91.8	91.8	15.6	15.6		27.8	28.1	
Actuated g/C Ratio	0.72	0.71	0.71	0.66	0.66	0.66	0.11	0.11		0.20	0.20	
v/c Ratio	0.07	0.38	0.02	0.12	0.24	0.02	0.21	0.51		0.24	0.46	
Control Delay (s/veh)	3.5	3.2	0.0	14.4	11.6	0.1	37.1	34.4		36.5	41.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	3.5	3.2	0.0	14.4	11.6	0.1	37.1	34.4		36.5	41.4	
LOS	A	A	A	B	B	A	D	C		D	D	
Approach Delay (s/veh)		3.2			11.4			35.0			40.2	
Approach LOS		A			B			C			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.51		
Intersection Signal Delay (s/veh): 11.1	Intersection LOS: B	
Intersection Capacity Utilization 61.9%	ICU Level of Service B	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	32	1207	15	28	711	20	27	108	53	174
v/c Ratio	0.07	0.38	0.02	0.12	0.24	0.02	0.21	0.51	0.24	0.46
Control Delay (s/veh)	3.5	3.2	0.0	14.4	11.6	0.1	37.1	34.4	36.5	41.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	3.5	3.2	0.0	14.4	11.6	0.1	37.1	34.4	36.5	41.4
Queue Length 50th (m)	0.7	13.0	0.0	3.1	37.2	0.0	6.0	21.0	11.6	40.3
Queue Length 95th (m)	m1.8	22.3	m0.0	9.2	51.0	0.0	15.8	42.9	21.1	56.4
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	493	3178	946	233	2934	1110	222	355	241	596
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.38	0.02	0.12	0.24	0.02	0.12	0.30	0.22	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1183	15	27	697	20	26	68	38	52	138	31
Future Volume (vph)	31	1183	15	27	697	20	26	68	38	52	138	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1750		1825	1866	
Flt Permitted	0.30	1.00	1.00	0.19	1.00	1.00	0.65	1.00		0.43	1.00	
Satd. Flow (perm)	578	4476	1306	356	4476	1633	1141	1750		817	1866	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	32	1207	15	28	711	20	27	69	39	53	141	33
RTOR Reduction (vph)	0	0	4	0	0	7	0	16	0	0	7	0
Lane Group Flow (vph)	32	1207	11	28	711	13	27	92	0	53	167	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	98.2	98.2	98.2	88.2	88.2	88.2	15.6	15.6		29.3	29.3	
Effective Green, g (s)	98.2	98.2	98.2	88.2	88.2	88.2	15.6	15.6		29.3	29.3	
Actuated g/C Ratio	0.70	0.70	0.70	0.63	0.63	0.63	0.11	0.11		0.21	0.21	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	441	3139	916	224	2819	1028	127	195		226	390	
v/s Ratio Prot	0.00	c0.27			0.16			0.05		0.01	c0.09	
v/s Ratio Perm	0.05		0.01	0.08		0.01	0.02			0.04		
v/c Ratio	0.07	0.38	0.01	0.13	0.25	0.01	0.21	0.47		0.23	0.43	
Uniform Delay, d1	6.7	8.5	6.3	10.4	11.4	9.7	56.6	58.3		45.3	48.1	
Progression Factor	0.45	0.34	1.00	1.00	1.00	1.00	0.59	0.53		0.78	0.83	
Incremental Delay, d2	0.1	0.3	0.0	1.1	0.2	0.0	0.8	1.8		0.5	0.7	
Delay (s)	3.1	3.1	6.3	11.5	11.6	9.7	34.0	32.6		35.8	40.5	
Level of Service	A	A	A	B	B	A	C	C		D	D	
Approach Delay (s/veh)		3.2			11.6			32.9			39.4	
Approach LOS		A			B			C			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	11.0	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.44			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.5	
Intersection Capacity Utilization	61.9%	ICU Level of Service	B	
Analysis Period (min)	15			

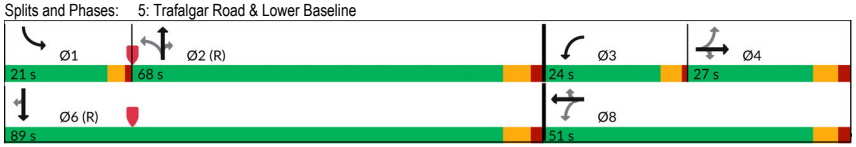
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	553	113	353	212	179	57	1436	260	480	2092	86
Future Volume (vph)	194	553	113	353	212	179	57	1436	260	480	2092	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	3614	1601	1789	3579	1541	1631	4214	1551	3319	4295	1521
Flt Permitted	0.614			0.158			0.064			0.950		
Satd. Flow (perm)	1123	3614	1601	298	3579	1541	110	4214	1551	3319	4295	1521
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			186			209			66
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	202	576	118	368	221	186	57	1436	260	500	2179	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	202	576	118	368	221	186	57	1436	260	500	2179	90
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	4	4	4	3	8	8	2	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	25.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	24.2	24.2	24.2	11.5	24.2	24.2	31.6	31.6	31.6	11.0	31.6	31.6
Total Split (s)	27.0	27.0	27.0	24.0	51.0	51.0	68.0	68.0	68.0	21.0	89.0	89.0
Total Split (%)	19.3%	19.3%	19.3%	17.1%	36.4%	36.4%	48.6%	48.6%	48.6%	15.0%	63.6%	63.6%
Maximum Green (s)	20.8	20.8	20.8	19.5	44.8	44.8	61.4	61.4	61.4	17.0	82.4	82.4
Yellow Time (s)	4.2	4.2	4.2	3.5	4.2	4.2	4.6	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	5.2	4.2	4.2	3.5	4.2	4.2	5.6	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0	7.0						
Flash Don't Walk (s)					11.0	11.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	21.8	22.8	22.8	47.5	46.8	46.8	62.4	63.4	63.4	18.0	84.4	84.4
Actuated g/C Ratio	0.16	0.16	0.16	0.34	0.33	0.33	0.45	0.45	0.45	0.13	0.60	0.60
v/c Ratio	1.16	0.98	0.35	1.15	0.18	0.29	1.16	0.75	0.32	1.17	0.84	0.10
Control Delay (s/veh)	168.7	90.3	17.8	141.3	41.0	15.0	218.4	34.9	6.5	137.1	35.3	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	168.7	90.3	17.8	141.3	41.0	15.0	218.4	34.9	6.5	137.1	35.3	10.3
LOS	F	F	B	F	D	B	F	C	A	F	D	B
Approach Delay (s/veh)		98.5			82.4			36.7			52.9	
Approach LOS		F			F			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.17			
Intersection Signal Delay (s/veh): 58.6		Intersection LOS: E	
Intersection Capacity Utilization 111.4%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	202	576	118	368	221	186	57	1436	260	500	2179	90
v/c Ratio	1.16	0.98	0.35	1.15	0.18	0.29	1.16	0.75	0.32	1.17	0.84	0.10
Control Delay (s/veh)	168.7	90.3	17.8	141.3	41.0	15.0	218.4	34.9	6.5	137.1	35.3	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	168.7	90.3	17.8	141.3	41.0	15.0	218.4	34.9	6.5	137.1	35.3	10.3
Queue Length 50th (m)	~68.5	85.3	5.8	~104.7	26.1	6.9	~19.7	142.8	8.1	~87.4	214.9	6.6
Queue Length 95th (m)	#120.4	#123.0	24.0	#168.7	37.5	29.5	#50.7	165.3	25.6	m#99.1	m229.7	m8.4
Internal Link Dist (m)		1293.1			1410.4			889.5			3062.5	
Turn Bay Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Base Capacity (vph)	174	588	339	319	1196	638	49	1908	816	426	2589	943
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.98	0.35	1.15	0.18	0.29	1.16	0.75	0.32	1.17	0.84	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	194	553	113	353	212	179	57	1436	260	480	2092	86
Future Volume (vph)	194	553	113	353	212	179	57	1436	260	480	2092	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	5.2	4.2	4.2	3.5	4.2	4.2	5.6	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1738	3614	1601	1789	3579	1541	1631	4214	1551	3319	4295	1521
Flt Permitted	0.61	1.00	1.00	0.16	1.00	1.00	0.06	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1123	3614	1601	298	3579	1541	110	4214	1551	3319	4295	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	202	576	118	368	221	186	57	1436	260	500	2179	90
RTOR Reduction (vph)	0	0	79	0	0	124	0	0	114	0	0	26
Lane Group Flow (vph)	202	576	39	368	221	62	57	1436	146	500	2179	64
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Prot	NA	Perm
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Actuated Green, G (s)	20.8	20.8	20.8	44.8	44.8	44.8	61.4	61.4	61.4	17.0	82.4	82.4
Effective Green, g (s)	21.8	22.8	22.8	45.8	46.8	46.8	62.4	63.4	63.4	18.0	84.4	84.4
Actuated g/C Ratio	0.16	0.16	0.16	0.33	0.33	0.33	0.45	0.45	0.45	0.13	0.60	0.60
Clearance Time (s)	6.2	6.2	6.2	4.5	6.2	6.2	6.6	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	5.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	174	588	260	315	1196	515	49	1908	702	426	2589	916
v/s Ratio Prot		0.16		c0.17	0.06			0.34		c0.15	0.51	
v/s Ratio Perm	0.18		0.02	c0.21		0.04	c0.52		0.09			0.04
v/c Ratio	1.16	0.98	0.15	1.17	0.18	0.12	1.16	0.75	0.21	1.17	0.84	0.07
Uniform Delay, d1	59.1	58.4	50.3	41.5	33.1	32.3	38.8	31.8	23.1	61.0	22.4	11.5
Progression Factor	1.00	1.00	1.00	1.24	1.22	3.14	1.00	1.00	1.00	0.90	1.47	2.51
Incremental Delay, d2	118.2	31.9	0.6	104.2	0.2	0.2	180.2	2.8	0.7	89.7	1.7	0.1
Delay (s)	177.3	90.2	50.9	155.5	40.6	101.8	219.0	34.6	23.8	144.7	34.7	29.0
Level of Service	F	F	D	F	D	F	F	C	C	F	C	C
Approach Delay (s/veh)		104.7			109.9			39.0			54.4	
Approach LOS		F			F			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	64.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	111.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

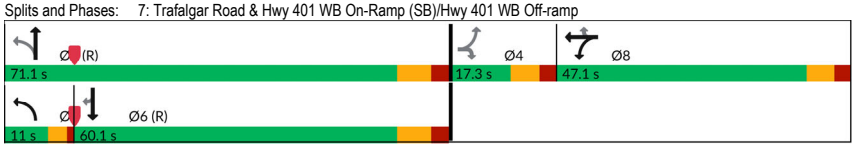
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	7	192	6	280	13	453	0	0	1162	117
Future Volume (vph)	0	0	7	192	6	280	13	453	0	0	1162	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1633	2879	1921	2456	1825	3941	0	0	4309	1276
Flt Permitted				0.950			0.170					
Satd. Flow (perm)	1883	0	1633	2879	1921	2456	327	3941	0	0	4309	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			277			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Adj. Flow (vph)	0	0	7	192	6	280	13	453	0	0	1162	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	7	192	6	280	13	453	0	0	1162	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	13.7	13.7	13.7	107.3	103.2			98.8	98.8
Actuated g/C Ratio			0.07	0.10	0.10	0.10	0.79	0.76			0.73	0.73
v/c Ratio			0.02	0.66	0.03	0.56	0.04	0.15			0.37	0.12
Control Delay (s/veh)			0.1	69.5	53.0	10.5	5.4	5.4			9.1	2.1
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.1	69.5	53.0	10.5	5.4	5.4			9.1	2.1
LOS			A	E	D	B	A	A			A	A
Approach Delay (s/veh)		0.1			34.8			5.4			8.5	
Approach LOS		A			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 13.5		Intersection LOS: B	
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	7	192	6	280	13	453	1162	117
v/c Ratio	0.02	0.66	0.03	0.56	0.04	0.15	0.37	0.12
Control Delay (s/veh)	0.1	69.5	53.0	10.5	5.4	5.4	9.1	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.1	69.5	53.0	10.5	5.4	5.4	9.1	2.1
Queue Length 50th (m)	0.0	30.7	1.5	0.0	0.5	11.6	33.5	0.0
Queue Length 95th (m)	0.0	44.2	5.7	15.8	3.5	29.5	96.5	9.7
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	377	849	567	922	336	3000	3140	963
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.23	0.01	0.30	0.04	0.15	0.37	0.12

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	7	192	6	280	13	453	0	0	1162	117
Future Volume (vph)	0	0	7	192	6	280	13	453	0	0	1162	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3941			4309	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.17	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	327	3941			4309	1276
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	7	192	6	280	13	453	0	0	1162	117
RTOR Reduction (vph)	0	0	7	0	0	252	0	0	0	0	0	39
Lane Group Flow (vph)	0	0	0	192	6	28	13	453	0	0	1162	78
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	13.7	13.7	13.7	97.3	97.3			90.5	90.5
Effective Green, g (s)			2.0	13.7	13.7	13.7	97.3	97.3			90.5	90.5
Actuated g/C Ratio			0.01	0.10	0.10	0.10	0.72	0.72			0.67	0.67
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	291	194	248	265	2829			2877	852
v/s Ratio Prot				c0.07	0.00		0.00	c0.11			c0.27	
v/s Ratio Perm			c0.00			0.01	0.03					0.06
v/c Ratio			0.00	0.66	0.03	0.11	0.05	0.16			0.40	0.09
Uniform Delay, d1			65.8	58.7	54.9	55.4	6.0	6.1			10.2	8.0
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	4.1	0.0	0.1	0.0	0.1			0.4	0.2
Delay (s)			65.8	62.7	54.9	55.5	6.0	6.2			10.7	8.2
Level of Service			E	E	D	E	A	A			B	A
Approach Delay (s/veh)		65.8			58.4			6.2			10.4	
Approach LOS		E			E			A			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	20.0	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.42				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5		
Intersection Capacity Utilization	57.9%	ICU Level of Service	B		
Analysis Period (min)	15				
c Critical Lane Group					

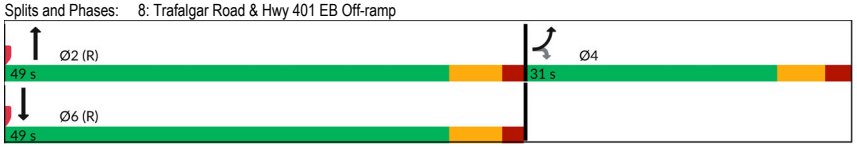
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	445	0	723	574	0
Future Volume (vph)	114	445	0	723	574	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.901	0.850				
Flt Protected	0.983					
Satd. Flow (prot)	2811	1339	0	4154	4117	0
Flt Permitted	0.983					
Satd. Flow (perm)	2811	1339	0	4154	4117	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	223	222				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Adj. Flow (vph)	114	445	0	723	574	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	337	222	0	723	574	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	11.2	11.2		54.8	54.8	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
v/c Ratio	0.58	0.59		0.25	0.20	
Control Delay (s/veh)	15.3	11.4		5.3	5.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	15.3	11.4		5.3	5.0	
LOS	B	B		A	A	
Approach Delay (s/veh)	13.7			5.3	5.0	
Approach LOS	B			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay (s/veh): 7.8		Intersection LOS: A	
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	337	222	723	574
v/c Ratio	0.58	0.59	0.25	0.20
Control Delay (s/veh)	15.3	11.4	5.3	5.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.3	11.4	5.3	5.0
Queue Length 50th (m)	10.3	0.0	15.1	11.5
Queue Length 95th (m)	23.0	20.4	26.3	20.7
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	999	557	2844	2818
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.34	0.40	0.25	0.20

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	445	0	723	574	0
Future Volume (vph)	114	445	0	723	574	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2811	1339		4154	4117	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2811	1339		4154	4117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	445	0	723	574	0
RTOR Reduction (vph)	192	191	0	0	0	0
Lane Group Flow (vph)	145	31	0	723	574	0
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	11.2	11.2		54.8	54.8	
Effective Green, g (s)	11.2	11.2		54.8	54.8	
Actuated g/C Ratio	0.14	0.14		0.69	0.69	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	393	187		2845	2820	
v/s Ratio Prot	c0.05			c0.17	0.14	
v/s Ratio Perm		0.02				
v/c Ratio	0.37	0.17		0.25	0.20	
Uniform Delay, d1	31.2	30.3		4.8	4.6	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.4		0.2	0.2	
Delay (s)	31.8	30.7		5.0	4.8	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	31.4			5.0	4.8	
Approach LOS	C			A	A	

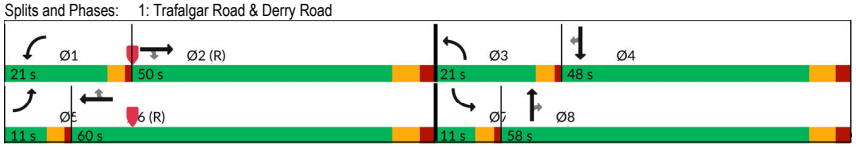
Intersection Summary				
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
Future Volume (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221			123			155			155
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
Shared Lane Traffic (%)												
Lane Group Flow (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	11.0	50.0	50.0	21.0	60.0	60.0	21.0	58.0	58.0	11.0	48.0	48.0
Total Split (%)	7.9%	35.7%	35.7%	15.0%	42.9%	42.9%	15.0%	41.4%	41.4%	7.9%	34.3%	34.3%
Maximum Green (s)	7.0	43.1	43.1	17.0	53.1	53.1	17.0	51.2	51.2	7.0	41.2	41.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.4	45.9	45.9	17.6	55.1	55.1	18.0	52.8	52.8	8.0	42.8	42.8
Actuated g/C Ratio	0.06	0.33	0.33	0.13	0.39	0.39	0.13	0.38	0.38	0.06	0.31	0.31
v/c Ratio	1.00	0.60	0.33	0.70	1.06	0.12	1.15	0.85	0.30	0.47	0.54	0.78
Control Delay (s/veh)	151.7	25.9	3.5	64.4	75.7	2.7	131.8	39.9	13.7	82.7	29.9	27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	151.7	25.9	3.5	64.4	75.7	2.7	131.8	39.9	13.7	82.7	29.9	27.2
LOS	F	C	A	E	E	A	F	D	B	F	C	C
Approach Delay (s/veh)		41.6			71.4			58.5			32.6	
Approach LOS		D			E			E			C	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green		
Natural Cycle: 120		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.15		
Intersection Signal Delay (s/veh): 54.9	Intersection LOS: D	
Intersection Capacity Utilization 89.9%	ICU Level of Service E	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
v/c Ratio	1.00	0.60	0.33	0.70	1.06	0.12	1.15	0.85	0.30	0.47	0.54	0.78
Control Delay (s/veh)	151.7	25.9	3.5	64.4	75.7	2.7	131.8	39.9	13.7	82.7	29.9	27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	151.7	25.9	3.5	64.4	75.7	2.7	131.8	39.9	13.7	82.7	29.9	27.2
Queue Length 50th (m)	~32.5	88.0	10.3	38.8	~237.3	0.8	~79.6	171.0	26.0	10.8	71.2	86.3
Queue Length 95th (m)	#59.9	102.4	15.4	55.7	#272.0	m3.6	m#114.3	191.5	m40.8	m22.1	49.7	38.1
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	202	1468	663	450	1796	704	407	1616	691	183	1312	590
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.60	0.33	0.68	1.06	0.12	1.15	0.84	0.30	0.47	0.53	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
Future Volume (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	202	883	221	307	1902	87	469	1355	207	86	697	458
RTOR Reduction (vph)	0	0	149	0	0	53	0	0	97	0	0	108
Lane Group Flow (vph)	202	883	72	307	1902	34	469	1355	110	86	697	350
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	7.4	43.9	43.9	16.6	53.1	53.1	17.0	50.8	50.8	7.0	40.8	40.8
Effective Green, g (s)	8.4	45.9	45.9	17.6	55.1	55.1	18.0	52.8	52.8	8.0	42.8	42.8
Actuated g/C Ratio	0.06	0.33	0.33	0.13	0.39	0.39	0.13	0.38	0.38	0.06	0.31	0.31
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	202	1467	514	440	1796	630	407	1604	590	183	1300	478
v/s Ratio Prot	c0.06	0.20		0.09	c0.42		c0.15	c0.32		0.03	0.16	
v/s Ratio Perm			0.05			0.02			0.07			0.22
v/c Ratio	1.00	0.60	0.14	0.70	1.06	0.05	1.15	0.84	0.19	0.47	0.54	0.73
Uniform Delay, d1	65.8	39.4	33.2	58.7	42.5	26.3	61.0	39.9	29.2	63.9	40.4	43.5
Progression Factor	1.53	0.61	0.56	0.97	0.94	1.60	0.83	0.90	1.52	1.17	0.70	0.64
Incremental Delay, d2	58.0	1.5	0.5	4.9	36.9	0.1	86.6	3.3	0.2	3.3	0.7	5.9
Delay (s)	158.9	25.7	19.0	61.8	76.9	42.2	137.4	39.0	44.7	78.4	29.1	33.6
Level of Service	F	C	B	E	E	D	F	D	D	E	C	C
Approach Delay (s/veh)		45.2			73.6			62.3			34.2	
Approach LOS		D			E			E			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	57.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	89.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

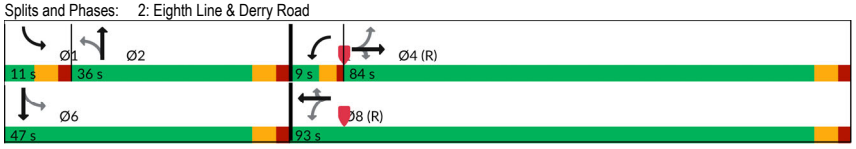
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1055	33	74	2242	5	76	0	96	5	6	10
Future Volume (vph)	5	1055	33	74	2242	5	76	0	96	5	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850			0.906	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1633	0	1825	1741	0
Flt Permitted	0.041			0.197			0.747			0.438		
Satd. Flow (perm)	79	4520	1555	378	4565	1633	1435	1633	0	841	1741	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		200			7	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	5	1055	33	74	2242	5	76	0	96	5	6	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	1055	33	74	2242	5	76	96	0	5	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		11.0	36.0	
Total Split (s)	84.0	84.0	84.0	9.0	93.0	93.0	36.0	36.0		11.0	47.0	
Total Split (%)	60.0%	60.0%	60.0%	6.4%	66.4%	66.4%	25.7%	25.7%		7.9%	33.6%	
Maximum Green (s)	78.0	78.0	78.0	5.0	87.0	87.0	30.0	30.0		5.0	41.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0			0	
Act Effct Green (s)	103.4	103.4	103.4	114.2	112.2	112.2	13.3	13.3		15.8	15.8	
Actuated g/C Ratio	0.74	0.74	0.74	0.82	0.80	0.80	0.10	0.10		0.11	0.11	
v/c Ratio	0.09	0.32	0.03	0.20	0.61	0.00	0.56	0.29		0.04	0.08	
Control Delay (s/veh)	27.2	21.7	4.1	4.7	7.3	0.0	53.6	6.8		49.6	36.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	27.2	21.7	4.1	4.7	7.3	0.0	53.6	6.8		49.6	36.0	
LOS	C	C	A	A	A	A	D	A		D	D	
Approach Delay (s/veh)		21.2			7.2			27.5			39.2	
Approach LOS		C			A			C			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 95		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.61		
Intersection Signal Delay (s/veh): 12.6		Intersection LOS: B
Intersection Capacity Utilization 82.4%		ICU Level of Service E
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	5	1055	33	74	2242	5	76	96	5	16
v/c Ratio	0.09	0.32	0.03	0.20	0.61	0.00	0.56	0.29	0.04	0.08
Control Delay (s/veh)	27.2	21.7	4.1	4.7	7.3	0.0	53.6	6.8	49.6	36.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.2	21.7	4.1	4.7	7.3	0.0	53.6	6.8	49.6	36.0
Queue Length 50th (m)	1.0	98.3	0.4	2.8	73.6	0.0	10.4	0.0	1.3	2.3
Queue Length 95th (m)	m2.2	88.8	4.3	10.4	161.5	0.0	38.2	20.3	4.9	8.3
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	58	3338	1174	377	3657	1322	307	507	135	514
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.32	0.03	0.20	0.61	0.00	0.25	0.19	0.04	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1055	33	74	2242	5	76	0	96	5	6	10
Future Volume (vph)	5	1055	33	74	2242	5	76	0	96	5	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1633		1825	1741	
Flt Permitted	0.04	1.00	1.00	0.20	1.00	1.00	0.75	1.00		0.44	1.00	
Satd. Flow (perm)	80	4520	1555	379	4565	1633	1435	1633		841	1741	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	1055	33	74	2242	5	76	0	96	5	6	10
RTOR Reduction (vph)	0	0	10	0	0	1	0	87	0	0	6	0
Lane Group Flow (vph)	5	1055	23	74	2242	4	76	9	0	5	10	0
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	97.8	97.8	97.8	107.4	107.4	107.4	13.3	13.3		20.6	20.6	
Effective Green, g (s)	97.8	97.8	97.8	107.4	107.4	107.4	13.3	13.3		20.6	20.6	
Actuated g/C Ratio	0.70	0.70	0.70	0.77	0.77	0.77	0.10	0.10		0.15	0.15	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	55	3157	1086	348	3502	1252	136	155		132	256	
v/s Ratio Prot		0.23		0.01	c0.49			0.01		0.00	c0.01	
v/s Ratio Perm	0.06		0.01	0.15		0.00	c0.05			0.01		
v/c Ratio	0.09	0.33	0.02	0.21	0.64	0.00	0.56	0.06		0.04	0.04	
Uniform Delay, d1	6.8	8.3	6.5	4.5	7.5	3.8	60.5	57.7		51.2	51.2	
Progression Factor	2.29	2.86	1.00	1.00	1.00	1.00	0.64	1.00		1.00	1.00	
Incremental Delay, d2	3.1	0.3	0.0	0.3	0.9	0.0	4.8	0.2		0.1	0.1	
Delay (s)	18.6	24.0	6.5	4.8	8.4	3.8	43.6	57.8		51.4	51.3	
Level of Service	B	C	A	A	A	A	D	E		D	D	
Approach Delay (s/veh)		23.4			8.2			51.6			51.3	
Approach LOS		C			A			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

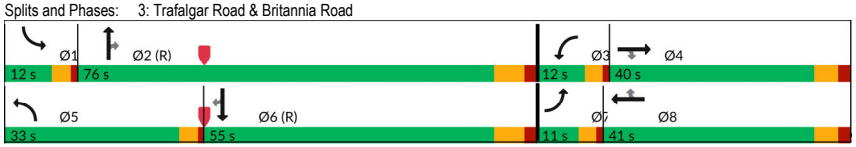
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
Future Volume (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			263			125			179			127
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
Shared Lane Traffic (%)												
Lane Group Flow (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	11.0	40.0	40.0	12.0	41.0	41.0	33.0	76.0	76.0	12.0	55.0	55.0
Total Split (%)	7.9%	28.6%	28.6%	8.6%	29.3%	29.3%	23.6%	54.3%	54.3%	8.6%	39.3%	39.3%
Maximum Green (s)	7.0	34.0	34.0	8.0	35.0	35.0	29.0	69.0	69.0	8.0	48.0	48.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.0	35.0	35.0	9.0	36.0	36.0	29.5	72.1	72.1	9.0	51.5	51.5
Actuated g/C Ratio	0.06	0.25	0.25	0.06	0.26	0.26	0.21	0.52	0.52	0.06	0.37	0.37
v/c Ratio	0.87	0.67	0.44	0.83	0.85	0.26	0.91	0.76	0.27	0.58	0.83	0.53
Control Delay (s/veh)	106.3	50.5	7.1	110.1	46.3	3.6	62.1	40.4	15.1	90.9	33.2	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	106.3	50.5	7.1	110.1	46.3	3.6	62.1	40.4	15.1	90.9	33.2	13.4
LOS	F	D	A	F	D	A	E	D	B	F	C	B
Approach Delay (s/veh)		47.9			51.4			43.3			33.1	
Approach LOS		D			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 43.0		Intersection LOS: D	
Intersection Capacity Utilization 82.2%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
v/c Ratio	0.87	0.67	0.44	0.83	0.85	0.26	0.91	0.76	0.27	0.58	0.83	0.53
Control Delay (s/veh)	106.3	50.5	7.1	110.1	46.3	3.6	62.1	40.4	15.1	90.9	33.2	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	106.3	50.5	7.1	110.1	46.3	3.6	62.1	40.4	15.1	90.9	33.2	13.4
Queue Length 50th (m)	24.7	78.7	0.0	28.8	111.2	0.1	90.6	157.2	21.8	17.6	129.1	45.5
Queue Length 95th (m)	#47.7	96.0	21.6	#49.1	61.4	5.9	m101.8	m174.7	m28.4	m28.1	151.2	66.5
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	174	1150	602	227	1206	499	688	2231	892	202	1579	645
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.65	0.44	0.83	0.83	0.25	0.89	0.76	0.27	0.57	0.83	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
Future Volume (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	152	744	263	189	998	125	615	1696	237	115	1315	343
RTOR Reduction (vph)	0	0	197	0	0	93	0	0	87	0	0	80
Lane Group Flow (vph)	152	744	66	189	998	32	615	1696	150	115	1315	263
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	7.0	33.0	33.0	8.0	34.0	34.0	28.5	70.0	70.0	8.0	49.5	49.5
Effective Green, g (s)	8.0	35.0	35.0	9.0	36.0	36.0	29.5	72.0	72.0	9.0	51.5	51.5
Actuated g/C Ratio	0.06	0.25	0.25	0.06	0.26	0.26	0.21	0.51	0.51	0.06	0.37	0.37
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	174	1119	396	227	1173	396	675	2229	805	200	1579	565
v/s Ratio Prot	0.05	0.17		c0.05	c0.22		c0.19	0.39		0.04	c0.31	
v/s Ratio Perm			0.04			0.02			0.10			0.17
v/c Ratio	0.87	0.66	0.17	0.83	0.85	0.08	0.91	0.76	0.19	0.57	0.83	0.46
Uniform Delay, d1	65.5	47.2	41.1	64.8	49.4	39.5	54.0	27.1	18.3	63.6	40.3	33.7
Progression Factor	1.00	1.00	1.00	1.30	0.78	0.37	0.97	1.42	2.85	1.25	0.69	0.48
Incremental Delay, d2	35.0	1.5	0.2	21.1	5.8	0.1	8.5	1.1	0.2	3.8	5.0	2.6
Delay (s)	100.5	48.7	41.3	105.2	44.5	14.7	61.0	39.7	52.2	83.2	32.7	18.7
Level of Service	F	D	D	F	D	B	E	D	D	F	C	B
Approach Delay (s/veh)		53.8			50.4			46.0			33.2	
Approach LOS		D			D			D			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	44.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	82.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

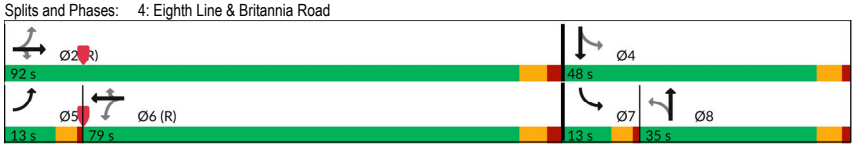
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	963	17	32	1230	32	53	107	61	31	58	57
Future Volume (vph)	20	963	17	32	1230	32	53	107	61	31	58	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.946			0.926	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1791	0	1825	1744	0
Flt Permitted	0.149			0.248			0.683			0.324		
Satd. Flow (perm)	286	4476	1328	476	4520	1633	1312	1791	0	622	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		19			36	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	20	963	17	32	1230	32	53	107	61	31	58	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	963	17	32	1230	32	53	168	0	31	115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	13.0	92.0	92.0	79.0	79.0	79.0	35.0	35.0		13.0	48.0	
Total Split (%)	9.3%	65.7%	65.7%	56.4%	56.4%	56.4%	25.0%	25.0%		9.3%	34.3%	
Maximum Green (s)	8.5	85.2	85.2	72.2	72.2	72.2	29.3	29.3		8.5	42.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	104.1	101.8	101.8	95.3	95.3	95.3	18.1	18.1		26.9	25.7	
Actuated g/C Ratio	0.74	0.73	0.73	0.68	0.68	0.68	0.13	0.13		0.19	0.18	
v/c Ratio	0.07	0.30	0.02	0.10	0.40	0.03	0.31	0.68		0.17	0.33	
Control Delay (s/veh)	1.0	0.8	0.0	12.8	12.2	0.0	48.3	53.4		45.2	34.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	1.0	0.8	0.0	12.8	12.2	0.0	48.3	53.4		45.2	34.8	
LOS	A	A	A	B	B	A	D	D		D	C	
Approach Delay (s/veh)		0.8			11.9			52.2			37.0	
Approach LOS		A			B			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.68		
Intersection Signal Delay (s/veh): 12.5		Intersection LOS: B
Intersection Capacity Utilization 62.8%		ICU Level of Service B
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	20	963	17	32	1230	32	53	168	31	115
v/c Ratio	0.07	0.30	0.02	0.10	0.40	0.03	0.31	0.68	0.17	0.33
Control Delay (s/veh)	1.0	0.8	0.0	12.8	12.2	0.0	48.3	53.4	45.2	34.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	1.0	0.8	0.0	12.8	12.2	0.0	48.3	53.4	45.2	34.8
Queue Length 50th (m)	0.0	1.5	0.0	3.3	69.6	0.0	13.9	42.0	7.5	20.6
Queue Length 95th (m)	m0.3	5.6	m0.0	9.6	95.5	0.0	24.4	58.7	14.5	33.5
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	305	3253	980	323	3077	1141	274	389	192	552
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.30	0.02	0.10	0.40	0.03	0.19	0.43	0.16	0.21

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	963	17	32	1230	32	53	107	61	31	58	57
Future Volume (vph)	20	963	17	32	1230	32	53	107	61	31	58	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1790		1825	1743	
Flt Permitted	0.15	1.00	1.00	0.25	1.00	1.00	0.68	1.00		0.32	1.00	
Satd. Flow (perm)	286	4476	1328	477	4520	1633	1312	1790		623	1743	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	963	17	32	1230	32	53	107	61	31	58	57
RTOR Reduction (vph)	0	0	5	0	0	11	0	17	0	0	29	0
Lane Group Flow (vph)	20	963	12	32	1230	21	53	151	0	31	86	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	100.0	100.0	100.0	91.7	91.7	91.7	18.1	18.1		27.5	27.5	
Effective Green, g (s)	100.0	100.0	100.0	91.7	91.7	91.7	18.1	18.1		27.5	27.5	
Actuated g/C Ratio	0.71	0.71	0.71	0.66	0.66	0.66	0.13	0.13		0.20	0.20	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	246	3197	948	312	2960	1069	169	231		164	342	
v/s Ratio Prot	0.00	c0.22			c0.27			c0.08		0.01	c0.05	
v/s Ratio Perm	0.06		0.01	0.07		0.01	0.04			0.03		
v/c Ratio	0.08	0.30	0.01	0.10	0.42	0.02	0.31	0.66		0.19	0.25	
Uniform Delay, d1	6.9	7.3	5.8	8.9	11.4	8.4	55.3	58.0		46.5	47.6	
Progression Factor	0.08	0.08	1.00	1.00	1.00	1.00	0.80	0.78		1.03	1.03	
Incremental Delay, d2	0.1	0.2	0.0	0.7	0.4	0.0	1.0	6.4		0.6	0.4	
Delay (s)	0.7	0.8	5.8	9.6	11.9	8.5	45.4	51.4		48.3	49.6	
Level of Service	A	A	A	A	B	A	D	D		D	D	
Approach Delay (s/veh)		0.8			11.7			50.0			49.3	
Approach LOS		A			B			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.45				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		21.5	
Intersection Capacity Utilization	62.8%	ICU Level of Service		B	
Analysis Period (min)	15				

c Critical Lane Group

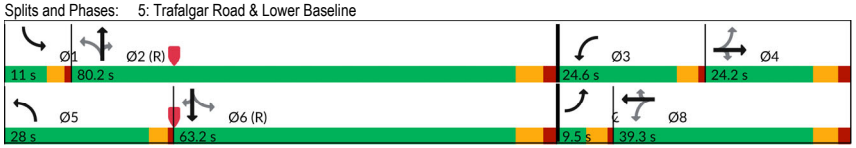
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
Future Volume (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	3579	1570	1807	3614	1585	1745	4378	1581	3319	4295	1551
Flt Permitted	0.455			0.213			0.065			0.068		
Satd. Flow (perm)	840	3579	1570	405	3614	1585	119	4378	1581	238	4295	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161			133			243			157
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	7.0	10.0	10.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2	24.2	11.5	24.2	24.2	11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	24.2	24.2	24.6	39.3	39.3	28.0	80.2	80.2	11.0	63.2	63.2
Total Split (%)	6.8%	17.3%	17.3%	17.6%	28.1%	28.1%	20.0%	57.3%	57.3%	7.9%	45.1%	45.1%
Maximum Green (s)	5.0	18.0	18.0	20.1	33.1	33.1	24.0	73.6	73.6	7.0	56.6	56.6
Yellow Time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.4	19.7	19.7	45.0	36.7	36.7	88.5	75.6	75.6	70.4	60.5	60.5
Actuated g/C Ratio	0.19	0.14	0.14	0.32	0.26	0.26	0.63	0.54	0.54	0.50	0.43	0.43
v/c Ratio	0.27	0.74	0.17	0.97	0.56	0.72	0.90	0.93	0.40	0.90	0.82	0.10
Control Delay (s/veh)	38.2	67.1	1.0	94.5	59.9	53.5	67.9	37.8	7.8	62.2	52.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.2	67.1	1.0	94.5	59.9	53.5	67.9	37.8	7.8	62.2	52.7	5.9
LOS	D	E	A	F	E	D	E	D	A	E	D	A
Approach Delay (s/veh)		55.6			67.3			37.0			52.2	
Approach LOS		E			E			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 120		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.97		
Intersection Signal Delay (s/veh): 48.5	Intersection LOS: D	
Intersection Capacity Utilization 92.7%	ICU Level of Service F	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
v/c Ratio	0.27	0.74	0.17	0.97	0.56	0.72	0.90	0.93	0.40	0.90	0.82	0.10
Control Delay (s/veh)	38.2	67.1	1.0	94.5	59.9	53.5	67.9	37.8	7.8	62.2	52.7	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.2	67.1	1.0	94.5	59.9	53.5	67.9	37.8	7.8	62.2	52.7	5.9
Queue Length 50th (m)	10.8	53.2	0.0	95.4	81.4	82.6	67.5	231.0	20.0	33.8	144.2	1.0
Queue Length 95th (m)	21.4	71.2	0.0	#135.0	100.1	116.9	#115.7	260.4	42.1	m#49.6	167.2	m3.7
Internal Link Dist (m)		1293.1			1410.4			889.5			3062.5	
Turn Bay Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Base Capacity (vph)	197	511	362	341	948	514	365	2364	965	301	1856	759
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.73	0.17	0.97	0.56	0.72	0.85	0.93	0.40	0.90	0.82	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
Future Volume (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1755	3579	1570	1807	3614	1585	1745	4378	1581	3319	4295	1551
Flt Permitted	0.45	1.00	1.00	0.21	1.00	1.00	0.06	1.00	1.00	0.07	1.00	1.00
Satd. Flow (perm)	840	3579	1570	405	3614	1585	119	4378	1581	238	4295	1551
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	54	371	61	332	531	369	310	2191	389	270	1518	75
RTOR Reduction (vph)	0	0	52	0	0	98	0	0	113	0	0	43
Lane Group Flow (vph)	54	371	9	332	531	271	310	2191	276	270	1518	32
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	22.6	18.6	18.6	43.2	34.7	34.7	84.0	72.7	72.7	65.0	57.7	57.7
Effective Green, g (s)	24.6	20.6	20.6	44.2	36.7	36.7	85.0	74.7	74.7	67.0	59.7	59.7
Actuated g/C Ratio	0.18	0.15	0.15	0.32	0.26	0.26	0.61	0.53	0.53	0.48	0.43	0.43
Clearance Time (s)	4.5	6.2	6.2	4.5	6.2	6.2	4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	180	526	231	339	947	415	342	2335	843	296	1831	661
v/s Ratio Prot	0.01	0.10		c0.15	0.15		c0.15	c0.50		0.05	0.35	
v/s Ratio Perm	0.04		0.01	c0.16		0.17	0.40		0.17	0.38		0.02
v/c Ratio	0.30	0.71	0.04	0.98	0.56	0.65	0.91	0.94	0.33	0.91	0.83	0.05
Uniform Delay, d1	49.1	56.8	51.2	41.5	44.7	46.0	44.3	30.5	18.4	34.9	35.6	23.5
Progression Factor	1.00	1.00	1.00	1.36	1.27	1.49	1.00	1.00	1.00	1.24	1.40	1.00
Incremental Delay, d2	0.9	5.4	0.1	41.3	1.2	4.6	26.3	8.9	1.0	22.7	3.0	0.1
Delay (s)	50.0	62.2	51.4	97.7	57.9	73.3	70.7	39.4	19.5	66.0	52.8	23.6
Level of Service	D	E	D	F	E	E	E	D	B	E	D	C
Approach Delay (s/veh)		59.5			73.2			40.1			53.5	
Approach LOS		E			E			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	51.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.98			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	92.7%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

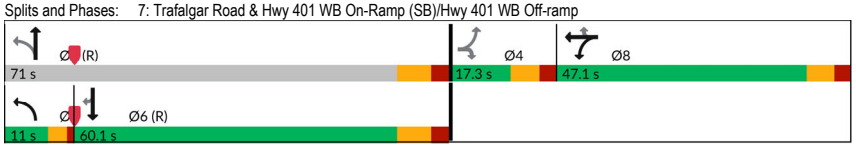
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	18	650	27	1396	8	904	0	0	750	45
Future Volume (vph)	17	0	18	650	27	1396	8	904	0	0	750	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	4309	0	0	4350	1306
Flt Permitted	0.597			0.950			0.168					
Satd. Flow (perm)	1147	0	1633	3372	1921	2737	323	4309	0	0	4350	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			331						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Adj. Flow (vph)	17	0	18	650	27	1396	8	904	0	0	750	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	18	650	27	1396	8	904	0	0	750	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.7		10.7	68.1	68.1	68.1	45.2	41.1			38.9	38.9
Actuated g/C Ratio	0.08		0.08	0.50	0.50	0.50	0.33	0.30			0.29	0.29
v/c Ratio	0.19		0.07	0.38	0.03	0.91	0.04	0.69			0.60	0.10
Control Delay (s/veh)	63.0		0.6	24.1	22.6	34.3	27.9	44.3			43.8	0.4
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.0		0.6	24.1	22.6	34.3	27.9	44.3			43.8	0.4
LOS	E		A	C	C	C	C	D			D	A
Approach Delay (s/veh)		30.9			30.9			44.1			41.4	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 36.3		Intersection LOS: D	
Intersection Capacity Utilization 85.6%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	18	650	27	1396	8	904	750	45
v/c Ratio	0.19	0.07	0.38	0.03	0.91	0.04	0.69	0.60	0.10
Control Delay (s/veh)	63.0	0.6	24.1	22.6	34.3	27.9	44.3	43.8	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.0	0.6	24.1	22.6	34.3	27.9	44.3	43.8	0.4
Queue Length 50th (m)	4.4	0.0	61.0	3.9	176.3	1.5	94.7	74.5	0.0
Queue Length 95th (m)	12.1	0.0	90.1	11.0	#270.0	4.8	102.7	93.5	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	90	248	1695	965	1540	185	2003	1669	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	0.38	0.03	0.91	0.04	0.45	0.45	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	18	650	27	1396	8	904	0	0	750	45
Future Volume (vph)	17	0	18	650	27	1396	8	904	0	0	750	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	4309			4350	1306
Flt Permitted	0.60		1.00	0.95	1.00	1.00	0.17	1.00			1.00	1.00
Satd. Flow (perm)	1147		1633	3372	1921	2737	322	4309			4350	1306
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	18	650	27	1396	8	904	0	0	750	45
RTOR Reduction (vph)	0	0	17	0	0	165	0	0	0	0	0	34
Lane Group Flow (vph)	17	0	1	650	27	1231	8	904	0	0	750	11
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.7		6.7	68.1	68.1	68.1	38.2	38.2			32.8	32.8
Effective Green, g (s)	6.7		6.7	68.1	68.1	68.1	38.2	38.2			32.8	32.8
Actuated g/C Ratio	0.05		0.05	0.50	0.50	0.50	0.28	0.28			0.24	0.24
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		80	1694	965	1375	106	1214			1052	316
v/s Ratio Prot				0.19	0.01		0.00	c0.21			0.17	
v/s Ratio Perm	c0.01		0.00			c0.45	0.02					0.01
v/c Ratio	0.30		0.01	0.38	0.03	0.90	0.08	0.74			0.71	0.03
Uniform Delay, d1	62.1		61.2	20.8	17.0	30.5	36.2	44.2			47.0	39.2
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.1		0.1	0.1	0.0	7.7	0.1	4.2			4.1	0.2
Delay (s)	65.2		61.3	20.8	17.0	38.2	36.3	48.4			51.2	39.5
Level of Service	E		E	C	B	D	D	D			D	D
Approach Delay (s/veh)		63.2			32.5			48.3			50.5	
Approach LOS		E			C			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	40.3	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	0.84				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)		26.5	
Intersection Capacity Utilization	85.6%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					

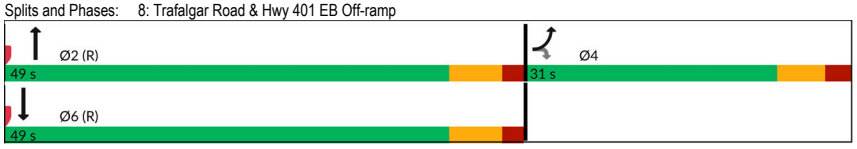
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	346	0	926	958	0
Future Volume (vph)	147	346	0	926	958	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.919	0.850				
Flt Protected	0.978					
Satd. Flow (prot)	2991	1327	0	4309	4350	0
Flt Permitted	0.978					
Satd. Flow (perm)	2991	1327	0	4309	4350	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	97	97				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Adj. Flow (vph)	147	346	0	926	958	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	320	173	0	926	958	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	12.4	12.4		53.6	53.6	
Actuated g/C Ratio	0.16	0.16		0.67	0.67	
v/c Ratio	0.59	0.60		0.32	0.33	
Control Delay (s/veh)	25.7	23.5		6.3	6.3	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	25.7	23.5		6.3	6.3	
LOS	C	C		A	A	
Approach Delay (s/veh)	24.9			6.3	6.3	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 10.2		Intersection LOS: B	
Intersection Capacity Utilization 44.5%		ICU Level of Service A	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	320	173	926	958
v/c Ratio	0.59	0.60	0.32	0.33
Control Delay (s/veh)	25.7	23.5	6.3	6.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.7	23.5	6.3	6.3
Queue Length 50th (m)	17.9	12.8	21.3	22.1
Queue Length 95th (m)	28.6	32.7	36.5	37.5
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	965	466	2884	2912
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.33	0.37	0.32	0.33

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	346	0	926	958	0
Future Volume (vph)	147	346	0	926	958	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.92	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2989	1327		4309	4350	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2989	1327		4309	4350	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	346	0	926	958	0
RTOR Reduction (vph)	82	82	0	0	0	0
Lane Group Flow (vph)	238	91	0	926	958	0
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	12.4	12.4		53.6	53.6	
Effective Green, g (s)	12.4	12.4		53.6	53.6	
Actuated g/C Ratio	0.16	0.16		0.67	0.67	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	463	205		2887	2914	
v/s Ratio Prot	c0.08			0.21	c0.22	
v/s Ratio Perm		0.07				
v/c Ratio	0.51	0.44		0.32	0.33	
Uniform Delay, d1	31.0	30.7		5.5	5.6	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	1.5		0.3	0.3	
Delay (s)	32.0	32.2		5.8	5.9	
Level of Service	C	C		A	A	
Approach Delay (s/veh)	32.1			5.8	5.9	
Approach LOS	C			A	A	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Appendix E ITE Trip Generation Manual

person parks off-site and walks to an office building, the trip is considered an entering vehicle trip for the office building. However, if a person travels by transit and walks the final distance, the trip is counted as a transit trip, not a vehicle trip.

Walk Trip—An inbound or outbound person trip where the greatest distance traveled is on foot or via any type of assistive device (e.g., wheelchair, scooter, skates, or skateboard).

Walk+Bike+Transit Trip—An inbound or outbound person trip made by walking, bicycling, or transit.

Setting/Location

Center City Core—The downtown area of a major metropolitan region, typically the focal point of a regional light- or heavy-rail transit system. This area is characterized by multi-storied buildings, diverse land uses, an extensive pedestrian sidewalk network, and shared/priced parking both on-street and in structured garages or surface lots. It is generally an employment destination and includes an adjacent commercial core.

Dense Multi-Use Urban—A fully (or nearly fully) developed area with diverse and interacting complementary land uses; good pedestrian connectivity; and convenient and frequent transit. It may be a well-developed urban area outside a major metropolitan downtown or a mid-sized urban area downtown. Common land uses include office, retail, residential, entertainment, hotel, and other commercial uses. The residential uses are typically multifamily or single-family on lots no larger than one-fourth acre. Buildings often have minimal setbacks from the sidewalk. Vehicles remain the primary mode of travel, but the area also supports walking, biking, and transit. Parking is provided on and off-street. The complementary land uses in dense multi-urban areas provide the opportunity for short trips within the area, made convenient by walking, biking, or transit. Significant transit access, such as rail or bus, supports high transit mode share.

General Urban/Suburban—A predominantly vehicle-oriented area where most person trips are made by personal or commercial vehicle. These areas may be fully developed (or nearly so) at low to medium density and typically contain a mix of residential and commercial land uses. Commercial uses are often located at intersections or along corridors and surrounded by parking. These corridors are often situated near low-density, almost entirely residential development. Most commercial buildings are located behind the parking area or surrounded by parking. The mixing of land uses is only in terms of their proximity, not in terms of function. A retail land use may focus on serving a regional clientele whereas a service land use may target motorists or pass-by vehicle trips. Although the land uses are geographically close, a lack of pedestrian, bicycling, and transit infrastructure discourages non-vehicle travel.

Rural—An agricultural or undeveloped area with scattered parcels and very low population density.

Time Periods

Friday—A continuous 24-hour period during a Friday.

Friday, Peak Hour of Generator—The one-hour period with the highest volume of vehicle or person trips entering and exiting a site on a Friday. This peak may occur during either the AM or PM.

Friday, Peak Hour of Adjacent Street Traffic—The one-hour period during the morning or evening commuter peak periods when combined site-generated vehicle traffic and adjacent street traffic is the highest on a Friday. If adjacent street traffic volumes are unknown, the peak hour of the adjacent street is assumed to be the one hour when the highest hourly vehicle trips are generated by the site during the

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing is a residential building with two or three floors (levels) of residences. Various configurations fit this description, including the following:

- Walk-up apartment or multiplex—access to the individual dwelling units is typically internal to the structure and provided through a shared entry, stairway, and hallway.
- Mansion apartment with several dwelling units within what appears from the outside to be a single-family dwelling unit.
- Stacked townhouse designed to match the external appearance of a townhouse, but which has dwelling units that share both floors and walls and with access through a central entry and stairway.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the three sites for which both the number of residents and the number of occupied dwelling units were available, there was an average of 2.72 residents per occupied dwelling unit.

For the two sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96.2 percent of the total dwelling units were occupied.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Arizona, British Columbia (CAN), California, Delaware, Florida, Illinois, Maine, Massachusetts, Minnesota, New Jersey, New York, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, and Washington.

Source Numbers

357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076, 1219, 1236, 1265, 1267

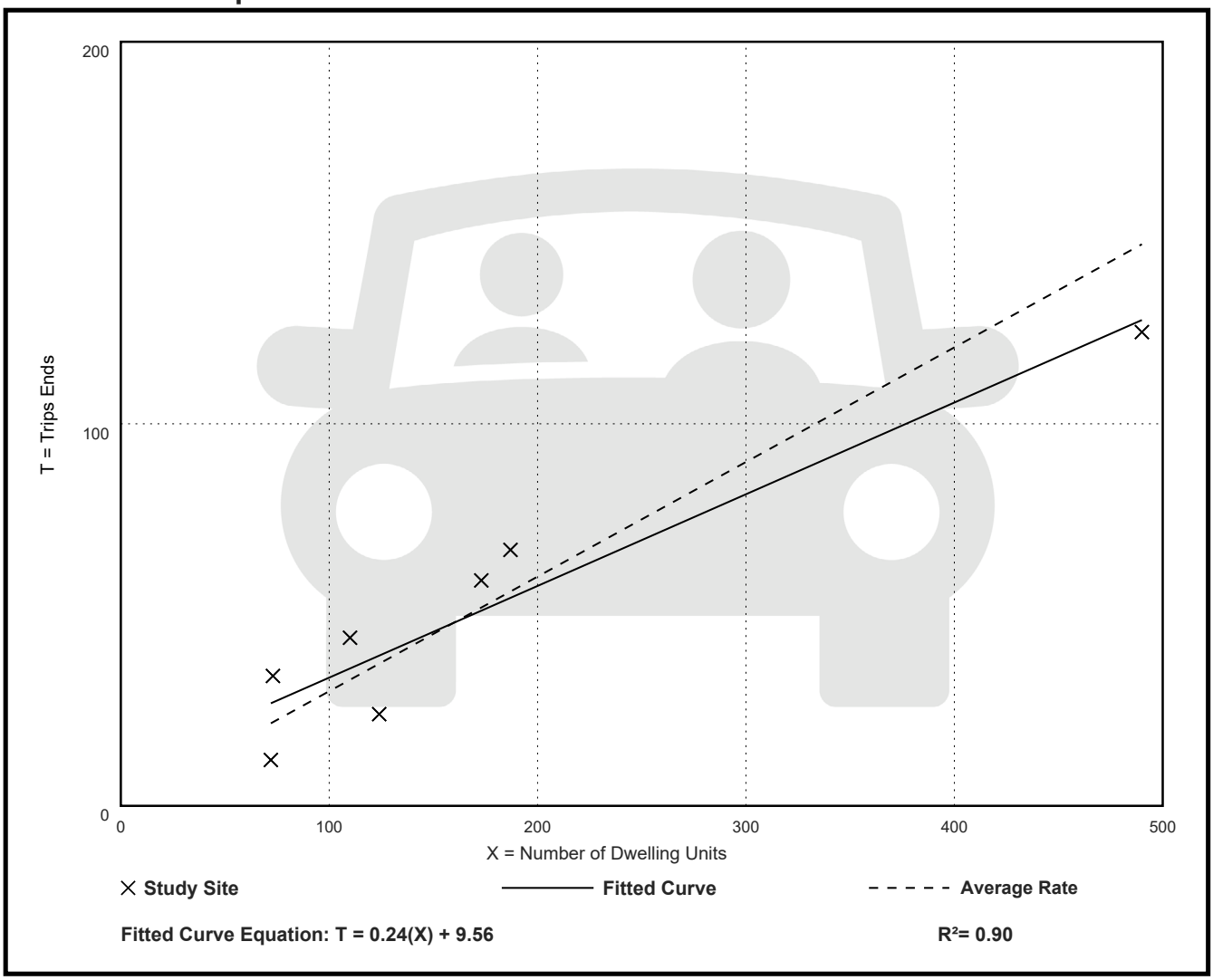
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**Dense Multi-Use Urban**
Number of Studies:	7
Avg. Num. of Dwelling Units:	176
Directional Distribution:	10% entering, 90% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.30	0.17 - 0.47	0.09

Data Plot and Equation



Fitted Curve Equation: T = 0.24(X) + 9.56

R^2= 0.90

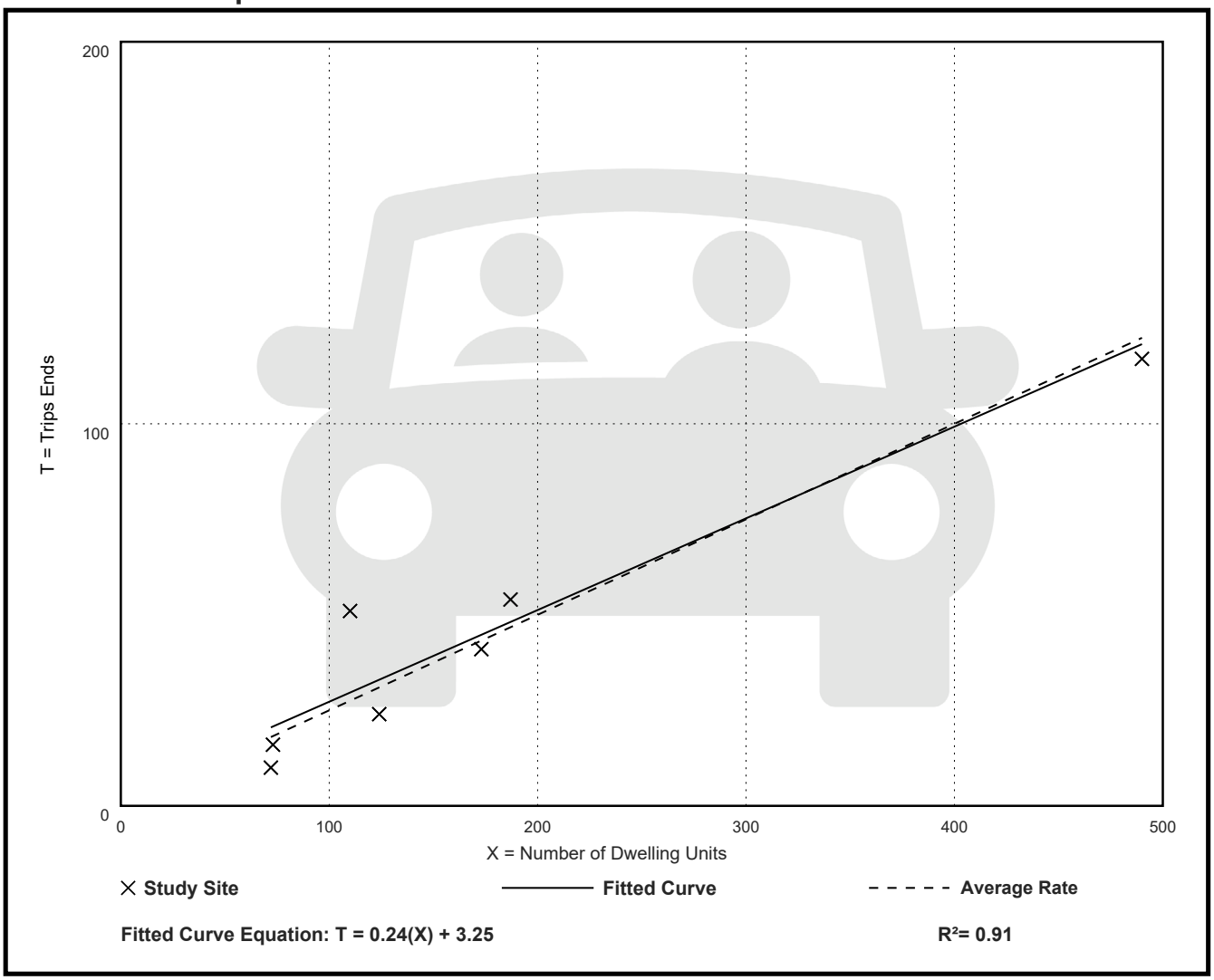
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**Dense Multi-Use Urban**
Number of Studies:	7
Avg. Num. of Dwelling Units:	176
Directional Distribution:	90% entering, 10% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.25	0.14 - 0.46	0.08

Data Plot and Equation



Fitted Curve Equation: T = 0.24(X) + 3.25

R^2= 0.91

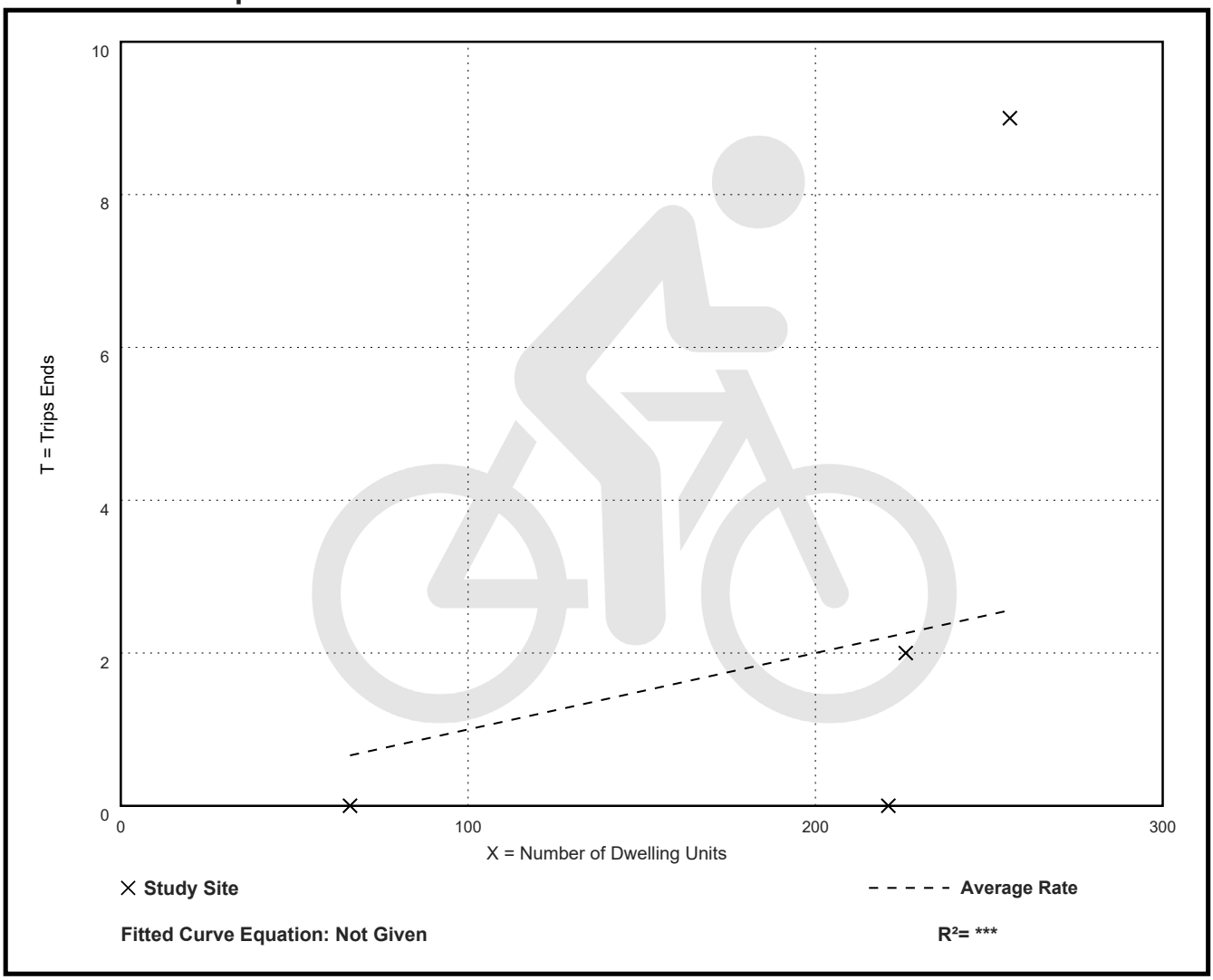
Multifamily Housing (Low-Rise)
Close to Rail Transit (220)

Bicycle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 4
Avg. Num. of Dwelling Units: 192
Directional Distribution: Not Available

Bicycle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.01	0.00 - 0.04	0.02

Data Plot and Equation



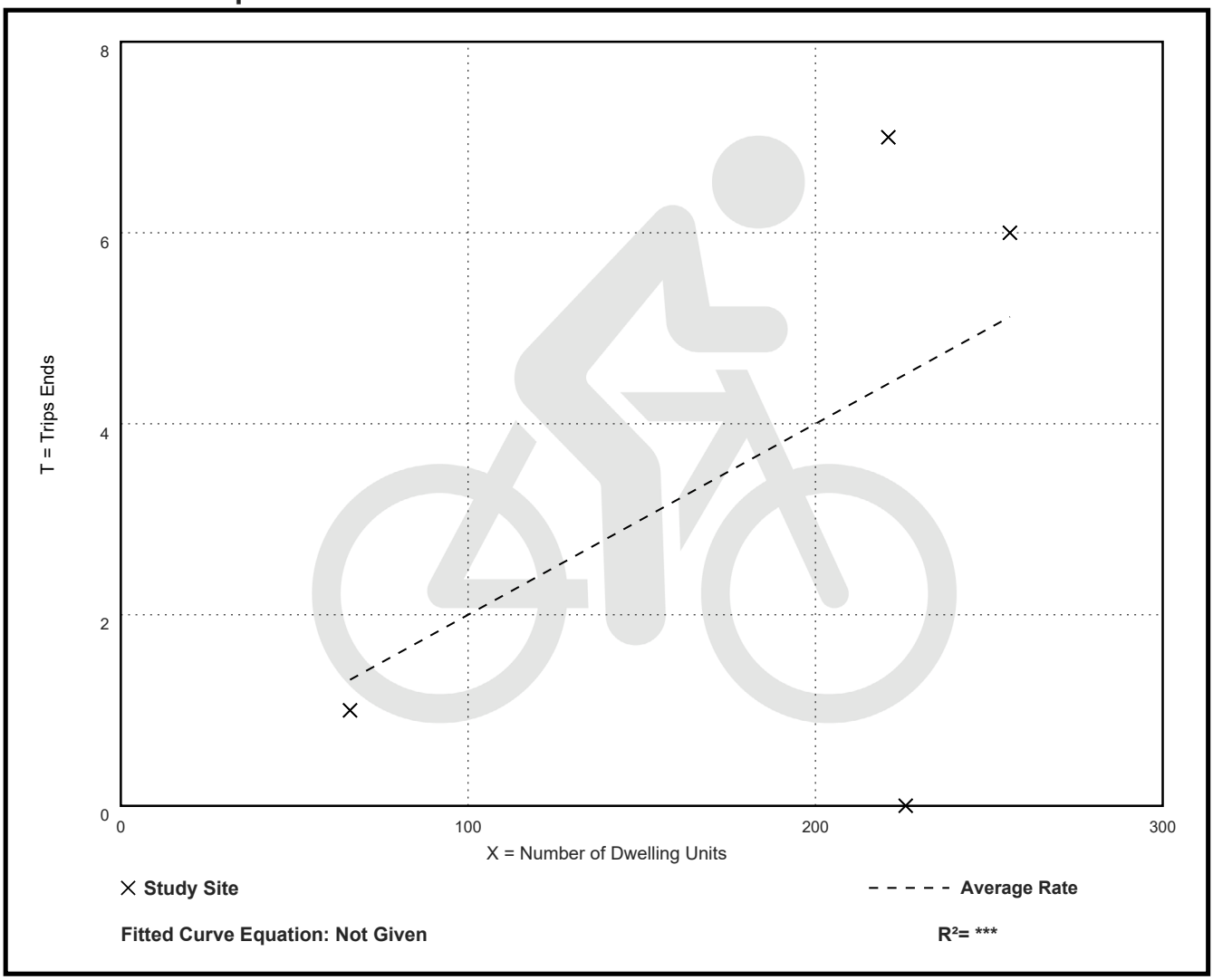
Multifamily Housing (Low-Rise)
Close to Rail Transit (220)

Bicycle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 4
Avg. Num. of Dwelling Units: 192
Directional Distribution: Not Available

Bicycle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.02	0.00 - 0.03	0.01

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= *

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing is a residential building with between four and 10 floors of residence. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there was an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, and Virginia.

Source Numbers

818, 857, 862, 866, 901, 904, 910, 949, 951, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1057, 1058, 1071, 1076, 1219, 1292

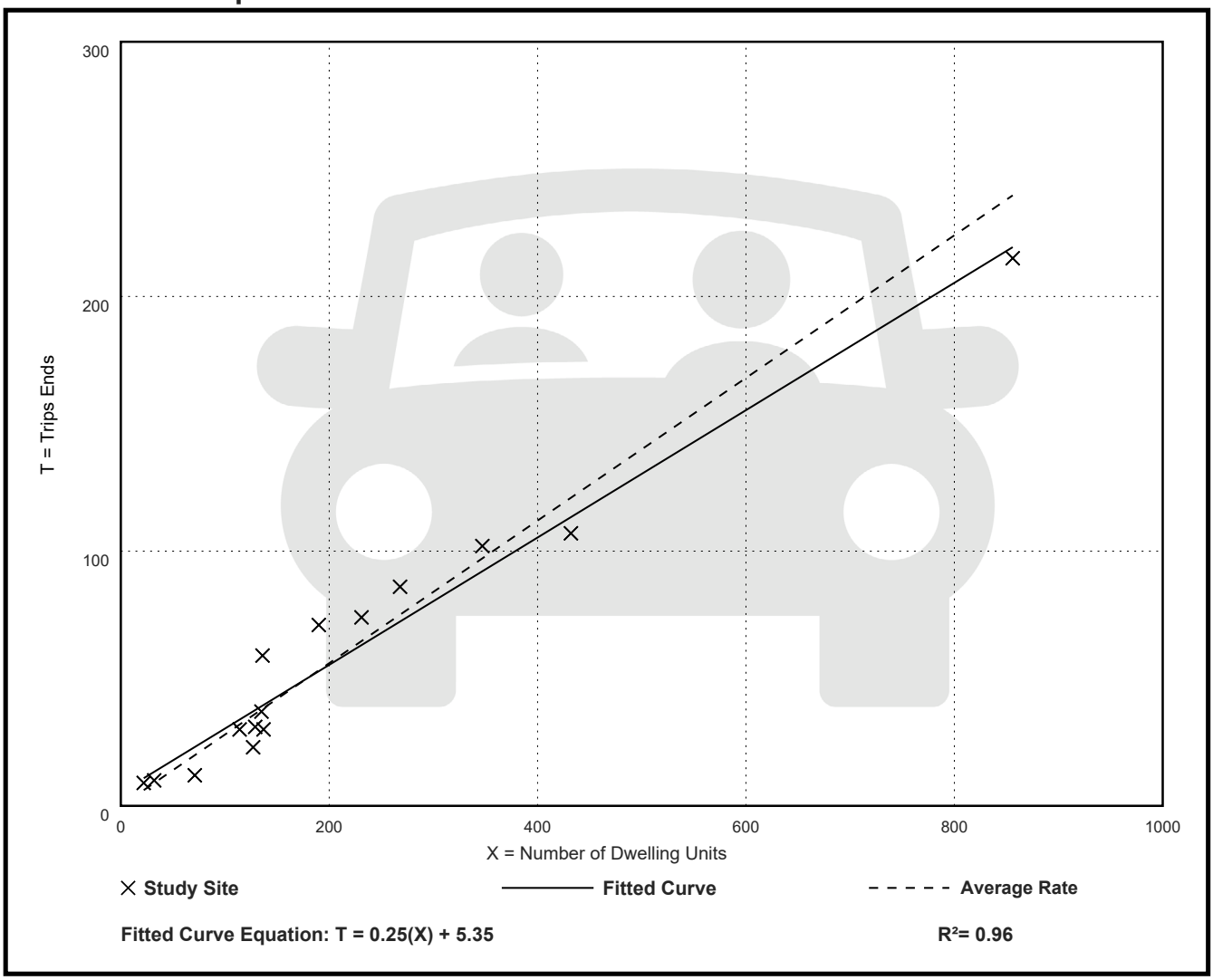
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**Dense Multi-Use Urban**
Number of Studies:	15
Avg. Num. of Dwelling Units:	215
Directional Distribution:	14% entering, 86% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.28	0.17 - 0.43	0.06

Data Plot and Equation



Fitted Curve Equation: T = 0.25(X) + 5.35

R^2= 0.96

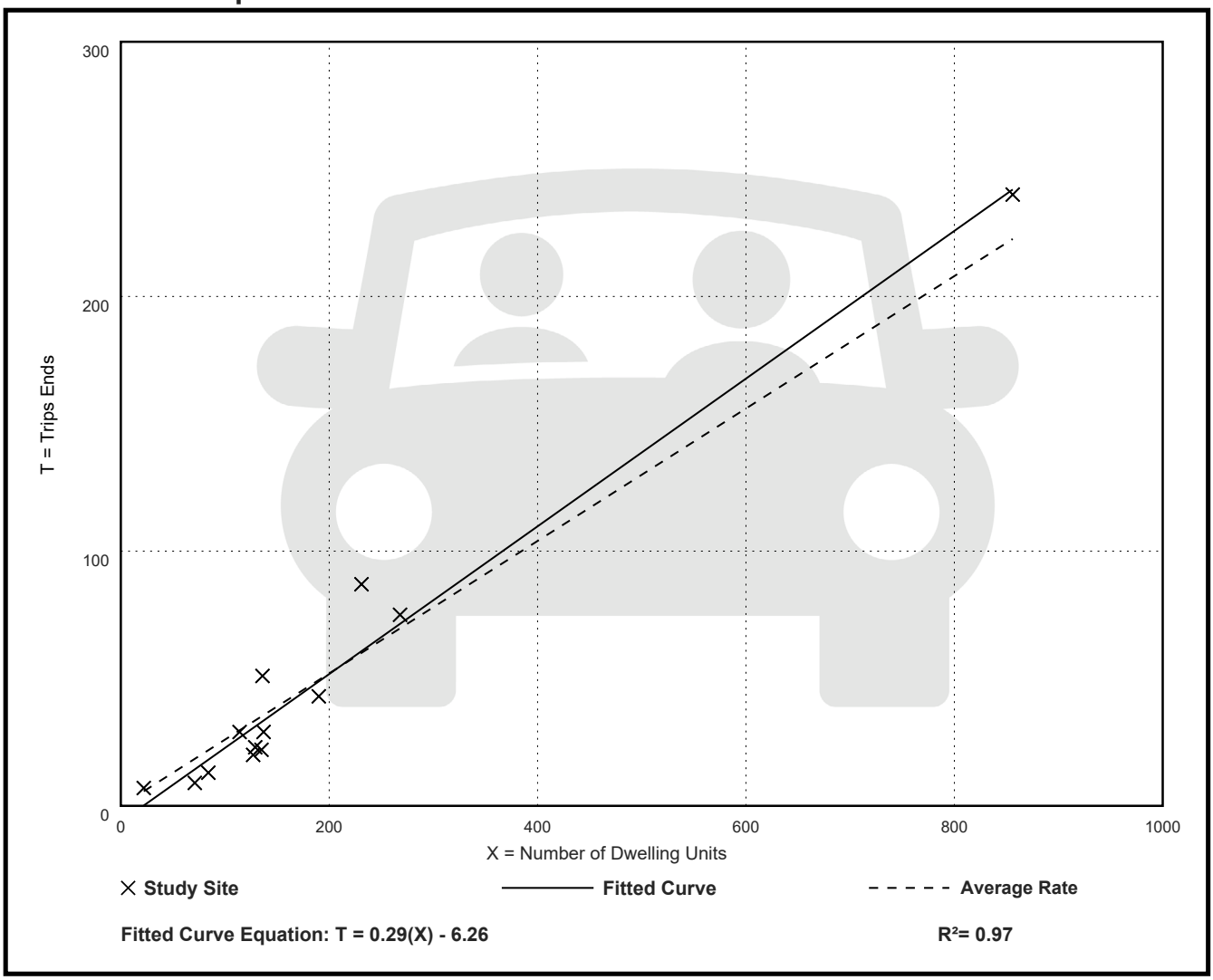
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 13
Avg. Num. of Dwelling Units: 192
Directional Distribution: 74% entering, 26% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.26	0.13 - 0.38	0.07

Data Plot and Equation



Fitted Curve Equation: T = 0.29(X) - 6.26

R^2= 0.97

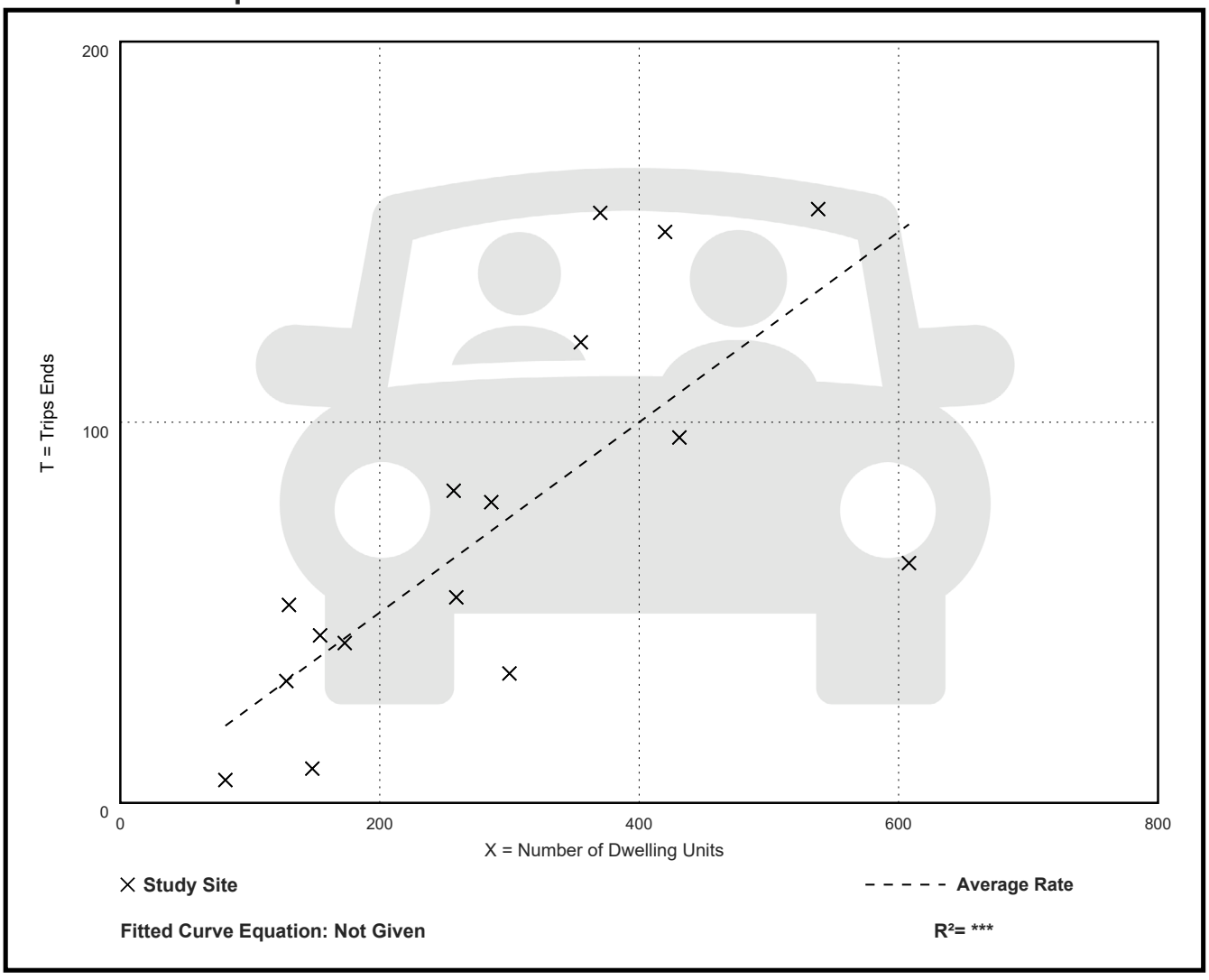
Multifamily Housing (Mid-Rise)
Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 16
Avg. Num. of Dwelling Units: 290
Directional Distribution: 15% entering, 85% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.25	0.06 - 0.42	0.11

Data Plot and Equation



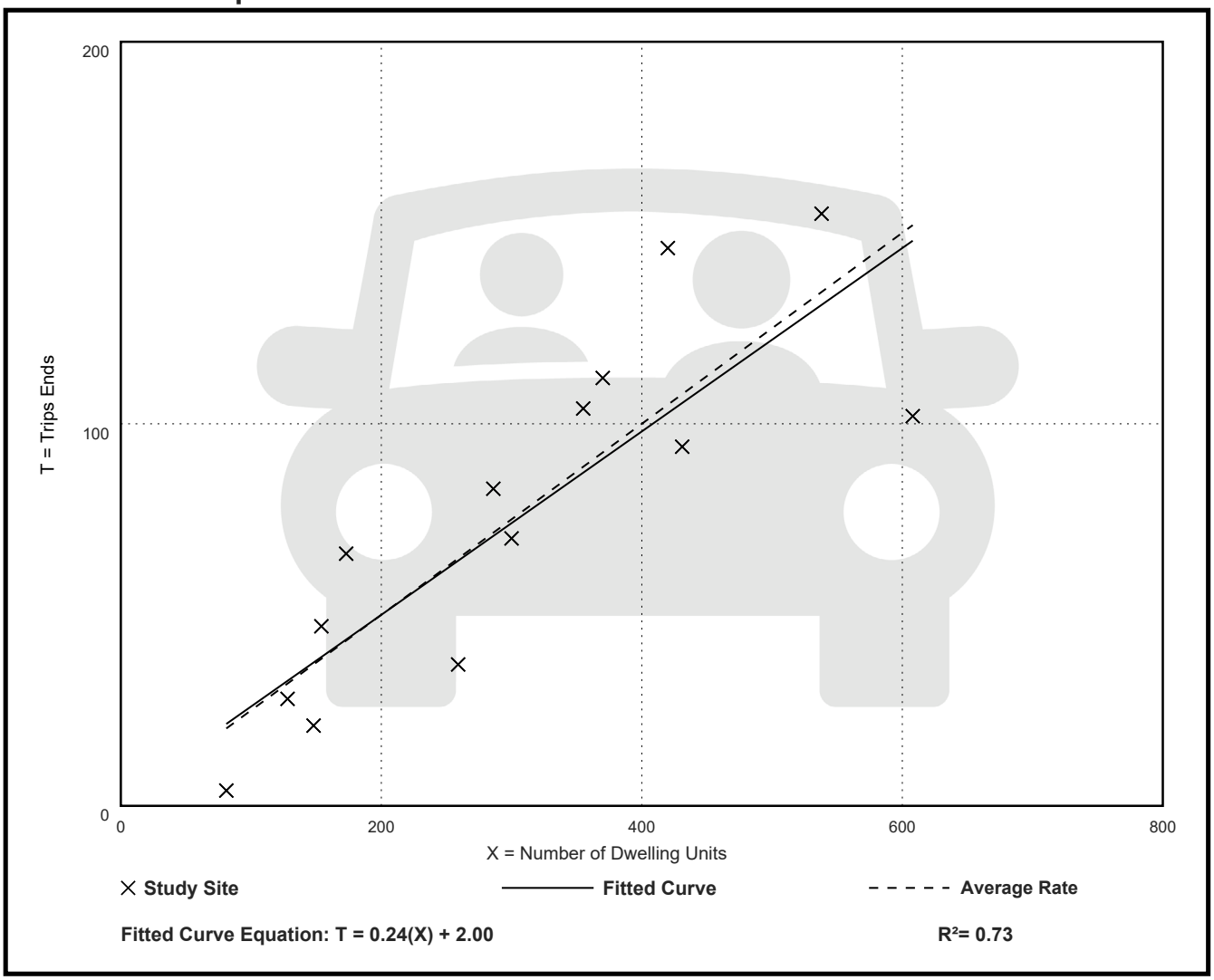
Multifamily Housing (Mid-Rise)
Close to Rail Transit (221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 14
Avg. Num. of Dwelling Units: 304
Directional Distribution: 74% entering, 26% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.25	0.05 - 0.38	0.08

Data Plot and Equation



Fitted Curve Equation: T = 0.24(X) + 2.00

R^2= 0.73

Land Use: 222
Multifamily Housing (High-Rise)

Description

High-rise multifamily housing is a residential building with more than 10 floors (levels) of residence. Access to individual dwelling units is through an outside building entrance, a lobby, elevators, and a set of hallways.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the 12 sites for which both the number of residents and the number of occupied dwelling units were available, there was an average of 1.6 residents per occupied dwelling unit.

For the 26 sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 98 percent of the total dwelling units were occupied.

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 2000s and the 2010s in California, District of Columbia, New York, Ontario (CAN), Oregon, and Virginia.

Source Numbers

818, 862, 901, 910, 949, 963, 964, 966, 967, 1056, 1057, 1076, 1077

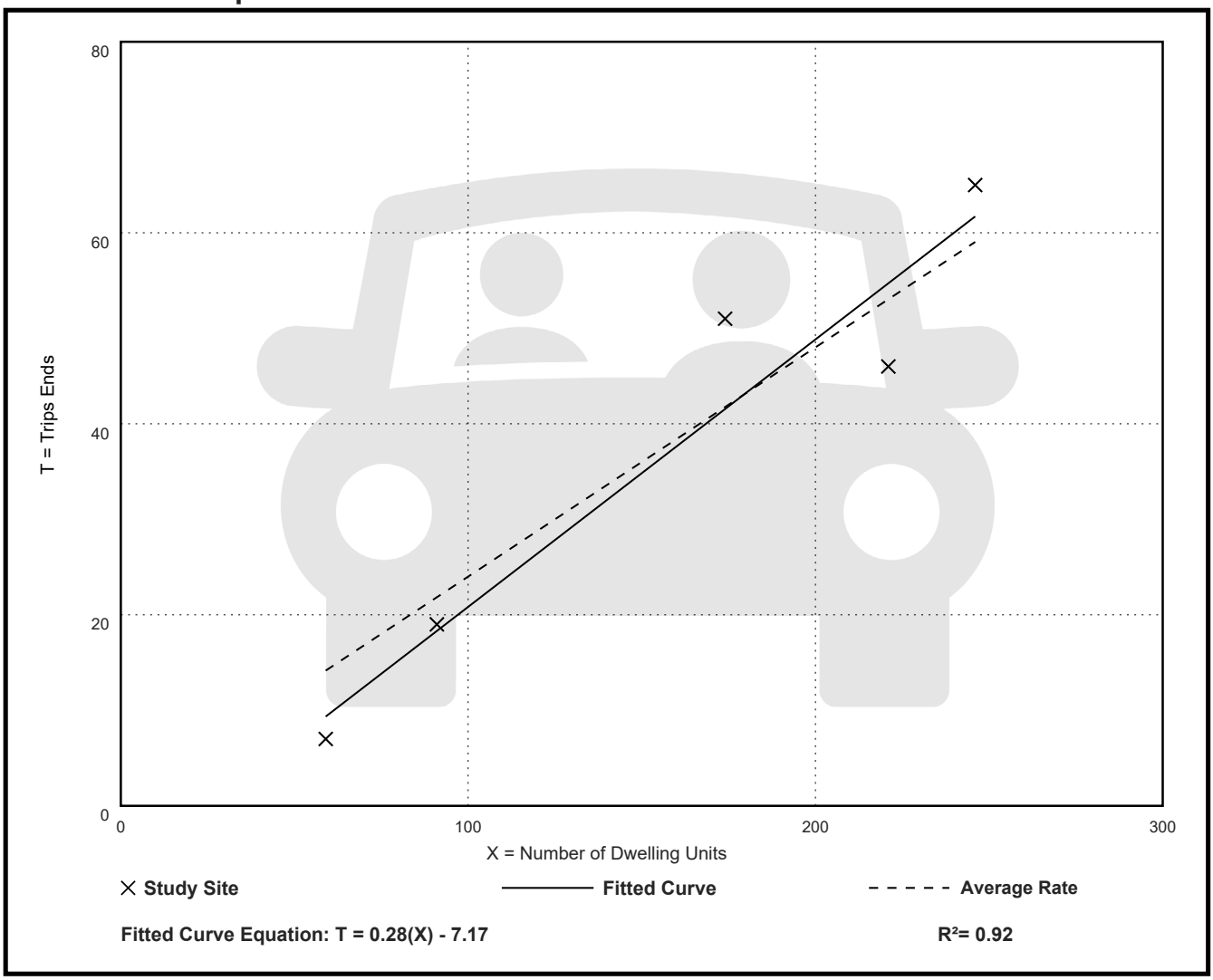
Multifamily Housing (High-Rise)
Not Close to Rail Transit (222)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 5
Avg. Num. of Dwelling Units: 158
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.24	0.12 - 0.29	0.05

Data Plot and Equation



Fitted Curve Equation: T = 0.28(X) - 7.17

R^2= 0.92

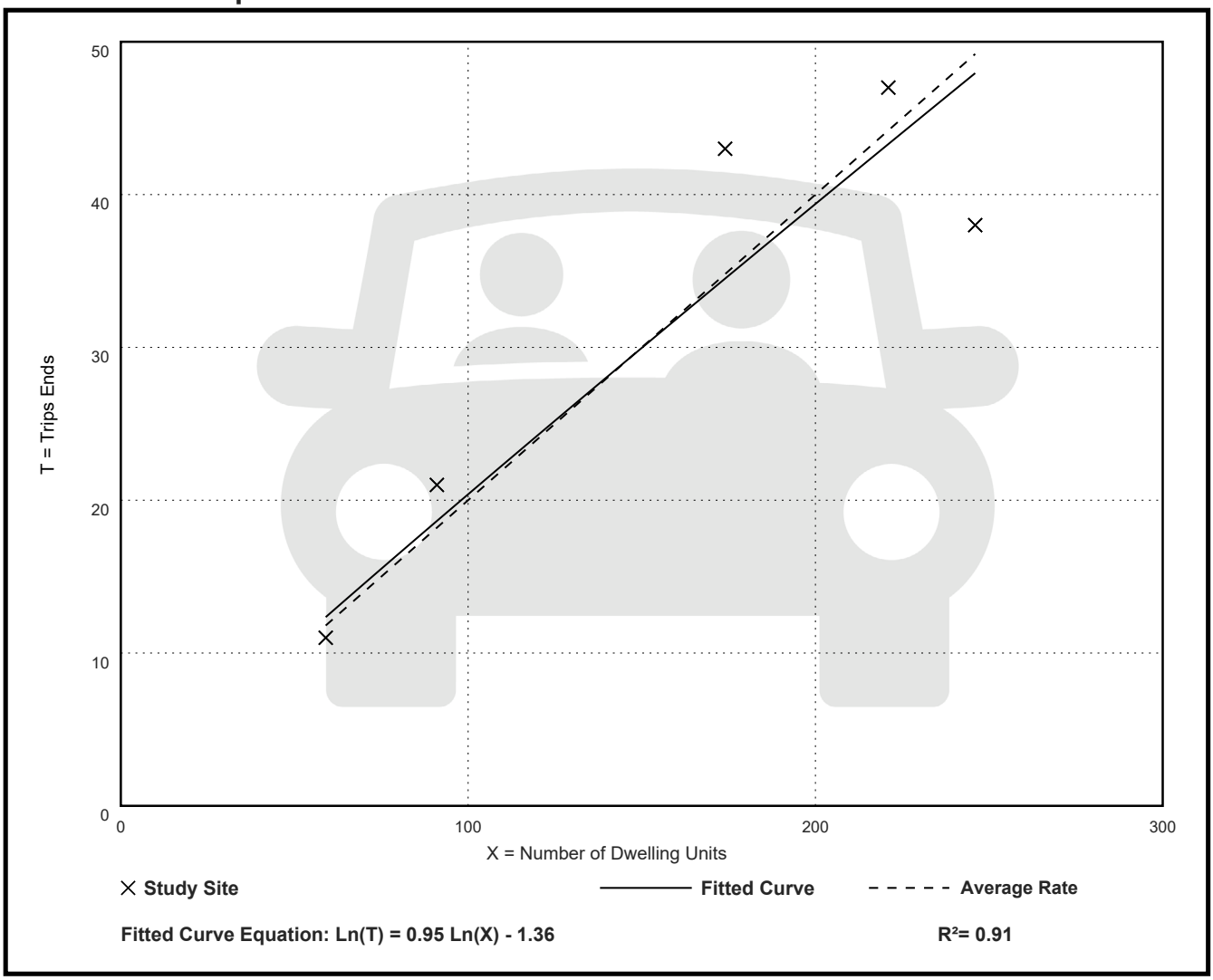
Multifamily Housing (High-Rise)
Not Close to Rail Transit (222)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**Dense Multi-Use Urban**
Number of Studies:	5
Avg. Num. of Dwelling Units:	158
Directional Distribution:	73% entering, 27% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.20	0.15 - 0.25	0.04

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.95 Ln(X) - 1.36

R^2= 0.91

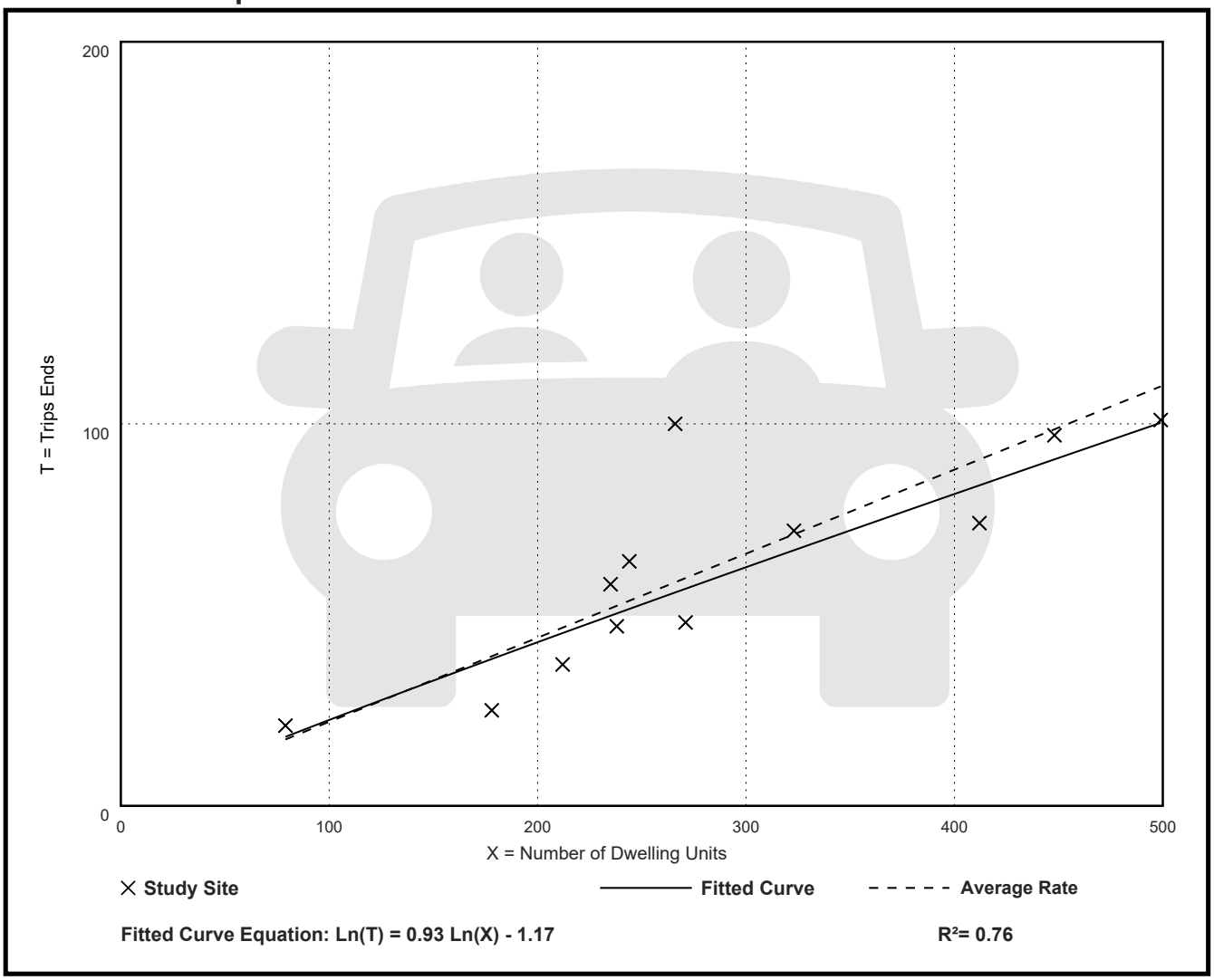
Multifamily Housing (High-Rise)
Close to Rail Transit (222)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**Dense Multi-Use Urban**
Number of Studies:	12
Avg. Num. of Dwelling Units:	284
Directional Distribution:	11% entering, 89% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.22	0.14 - 0.38	0.06

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.93 Ln(X) - 1.17

R^2= 0.76

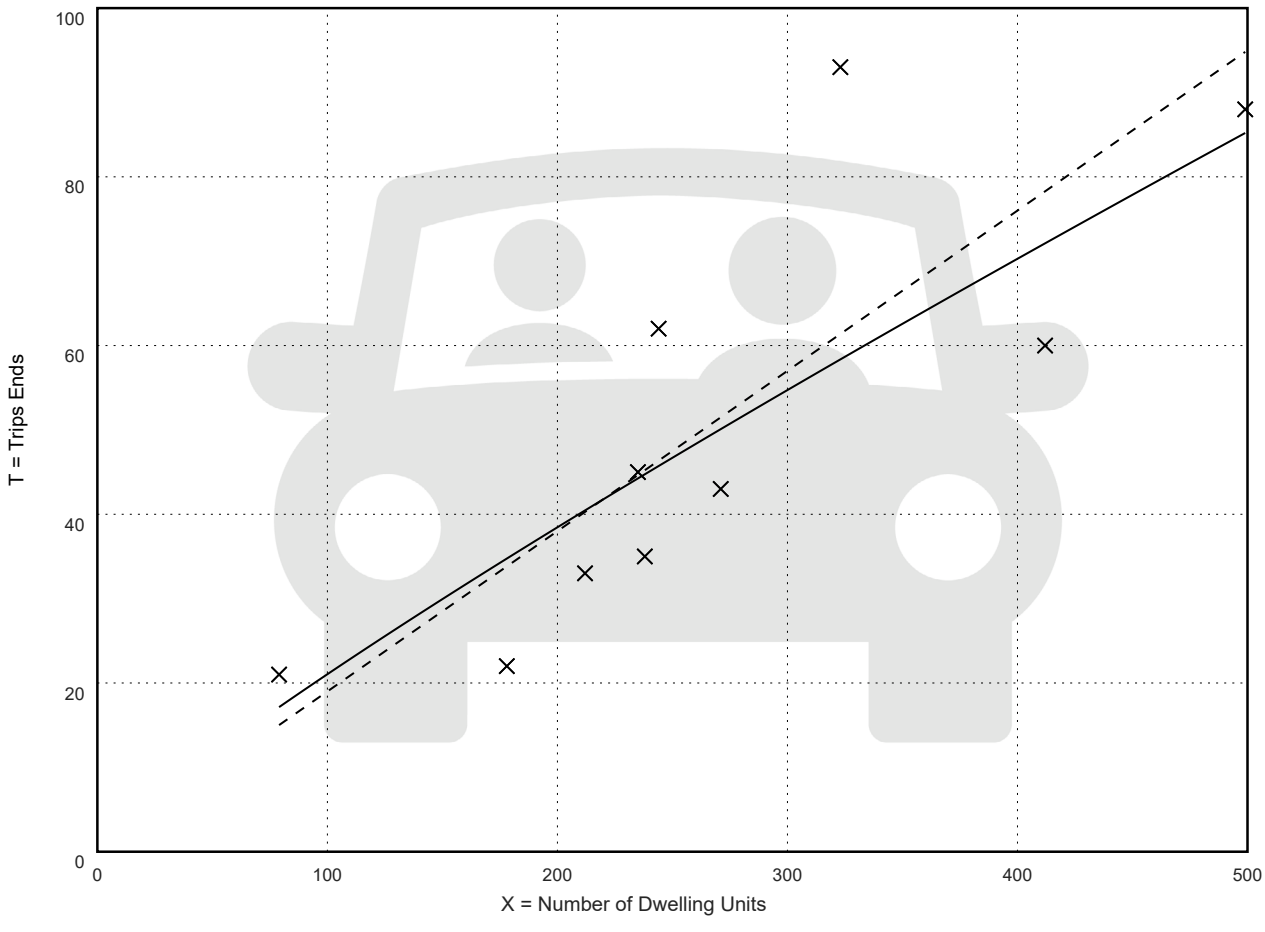
Multifamily Housing (High-Rise)
Close to Rail Transit (222)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 10
Avg. Num. of Dwelling Units: 269
Directional Distribution: 69% entering, 31% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.19	0.12 - 0.29	0.05

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.87 Ln(X) - 0.96

R^2= 0.70

Land Use: 710
General Office Building

Description

A general office building is a building with multiple tenants that employ persons in the management, direction, or conduct of legal, accounting, engineering, consulting, real estate, insurance, financial, or other professional services. A general office building with a gross floor area of 10,000 square feet or less is classified as a small office building (Land Use 712).

Additional Data

If two or more general office buildings are in close physical proximity (within walking distance) and function as a unit (perhaps with a shared parking facility and common or complementary tenants), the total gross floor area or employment of the paired office buildings can be used for calculating the site trip generation. If the individual buildings are isolated or not functionally related to one another, trip generation should be calculated for each building separately.

The average building occupancy varies considerably among the studies for which occupancy data were provided. The reported occupied gross floor area was 88 percent for general urban/suburban sites and 96 percent for the center city core and dense multi-use urban sites.

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, Connecticut, Georgia, Indiana, Kentucky, Maine, Minnesota, Montana, New Hampshire, New Jersey, Ontario (CAN), Texas, Utah, and Virginia.

Source Numbers

404, 407, 408, 562, 734, 850, 859, 862, 867, 869, 883, 884, 890, 891, 904, 944, 946, 964, 965, 972, 1009, 1030, 1058, 1061, 1219, 1221

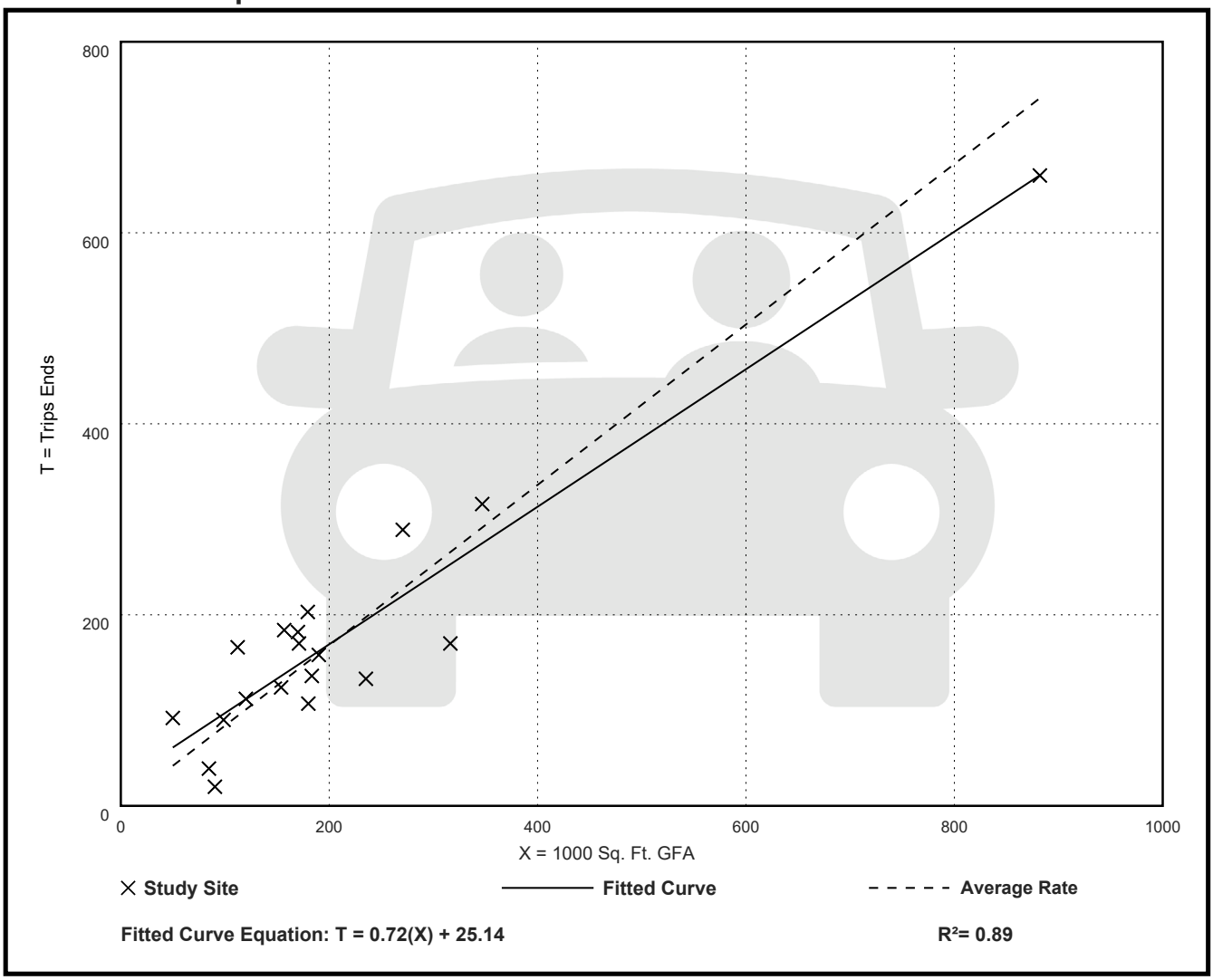
General Office Building
(710)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 19
Avg. 1000 Sq. Ft. GFA: 210
Directional Distribution: 87% entering, 13% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.84	0.22 - 1.84	0.27

Data Plot and Equation



Fitted Curve Equation: T = 0.72(X) + 25.14

R^2= 0.89

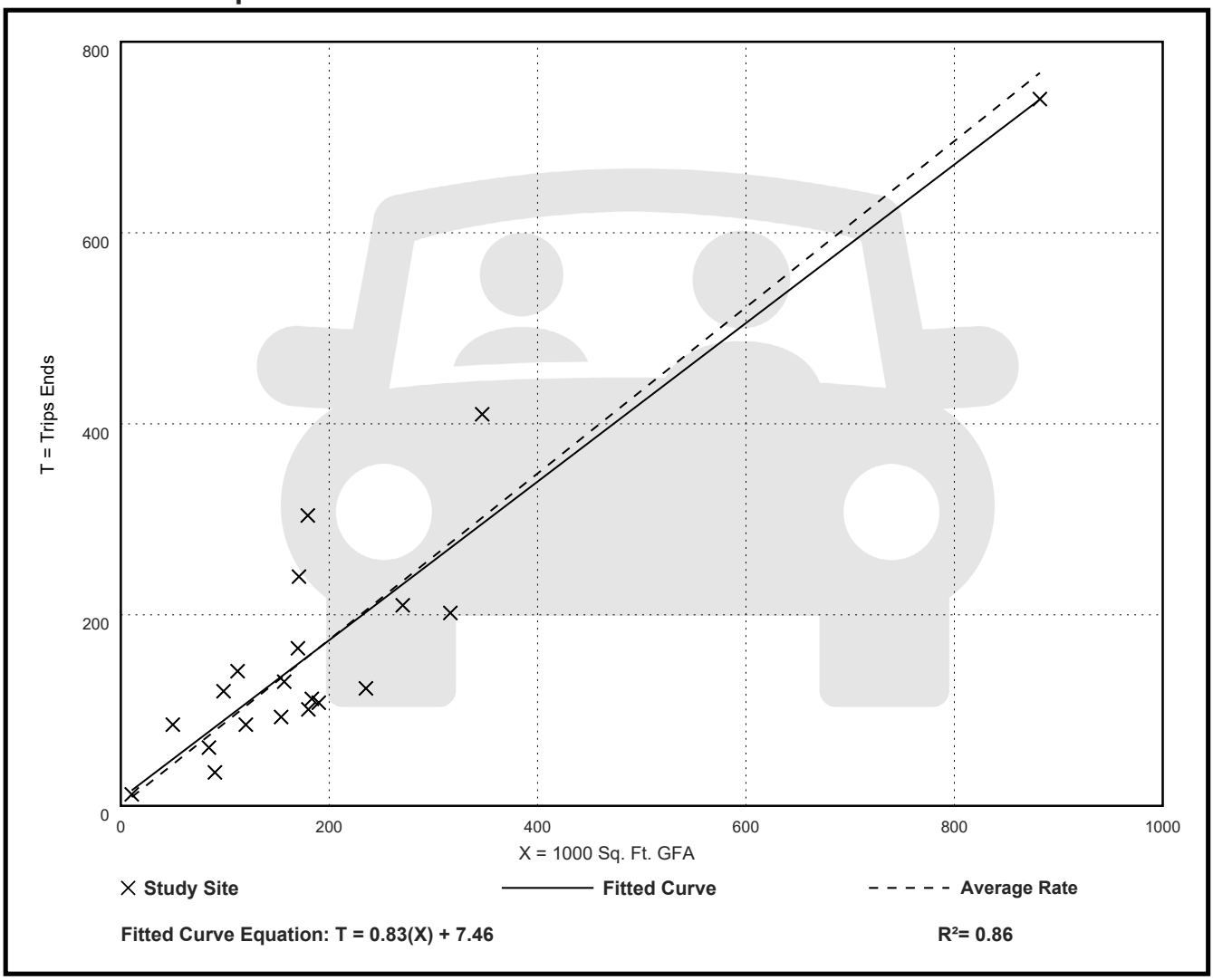
General Office Building
(710)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **Dense Multi-Use Urban**
Number of Studies: 20
Avg. 1000 Sq. Ft. GFA: 200
Directional Distribution: 16% entering, 84% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.87	0.39 - 1.70	0.33

Data Plot and Equation



Fitted Curve Equation: T = 0.83(X) + 7.46

R^2= 0.86

Land Use: 130
Industrial Park

Description

An industrial park contains several individual industrial or related facilities. It is characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities. Some parks in the database have a large number of small businesses and others have one or two dominant industries. Business park (Land Use 770) is a related use.

Additional Data

The sites were surveyed in the 2000s, 2010s, and the 2020s in Georgia, Massachusetts, Ontario (CAN), and Pennsylvania.

Source Numbers

706, 747, 753, 937, 1032, 1070, 1228

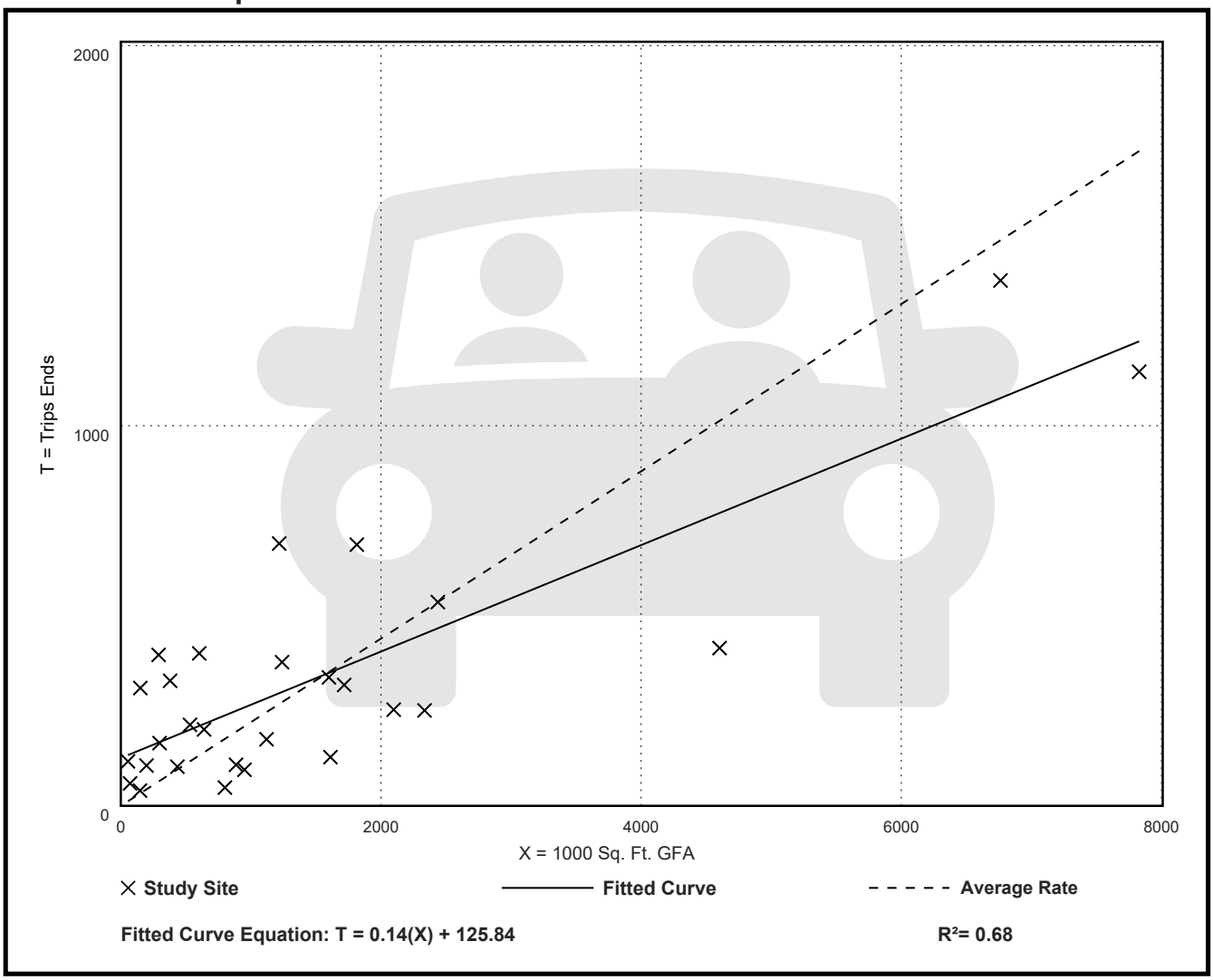
Industrial Park
(130)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	28
Avg. 1000 Sq. Ft. GFA:	1529
Directional Distribution:	77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.22	0.06 - 2.13	0.22

Data Plot and Equation



Fitted Curve Equation: T = 0.14(X) + 125.84

R^2= 0.68

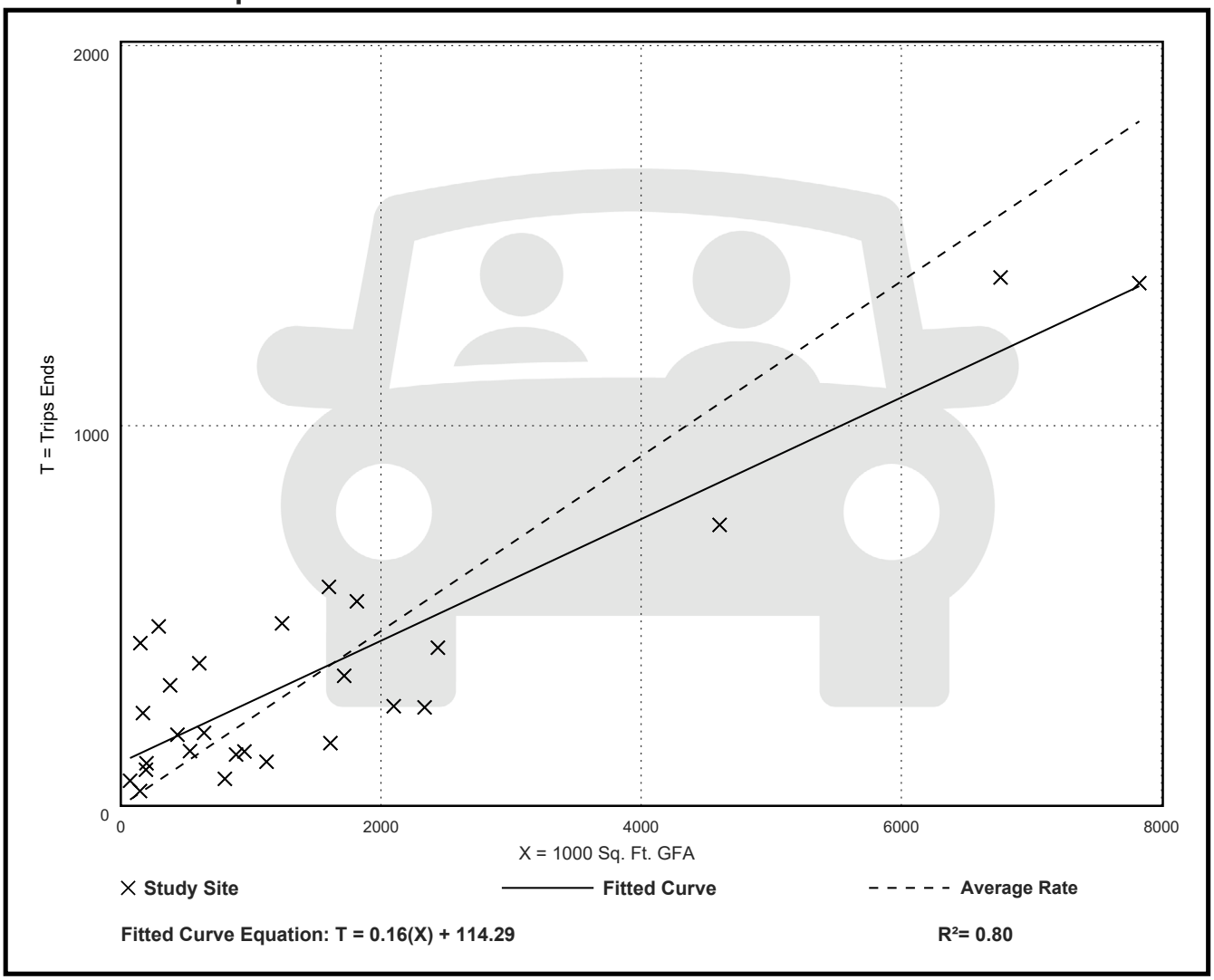
Industrial Park
(130)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	27
Avg. 1000 Sq. Ft. GFA:	1541
Directional Distribution:	28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.23	0.09 - 2.85	0.25

Data Plot and Equation



Fitted Curve Equation: T = 0.16(X) + 114.29

R^2= 0.80

Land Use: 411
Public Park

Description

A public park is owned and operated by a municipal, county, state, or federal agency. Park facilities in the study sites range from passive amenities, such as walking trails and picnic sites, to active amenities, such as basketball courts, playgrounds, skate parks, athletic fields, and horseshoe pits. Seasonal use of the individual sites differs widely because of the varying facilities and local conditions, such as weather.

Additional Data

The percentage of the park area that is used most intensively varies considerably within the studies contained in this land use. Therefore, caution should be used when using acres as an independent variable.

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Arizona, California, New Jersey, North Carolina, and Oregon.

Source Numbers

392, 407, 709, 729, 852, 905, 1208, 1247, 1266

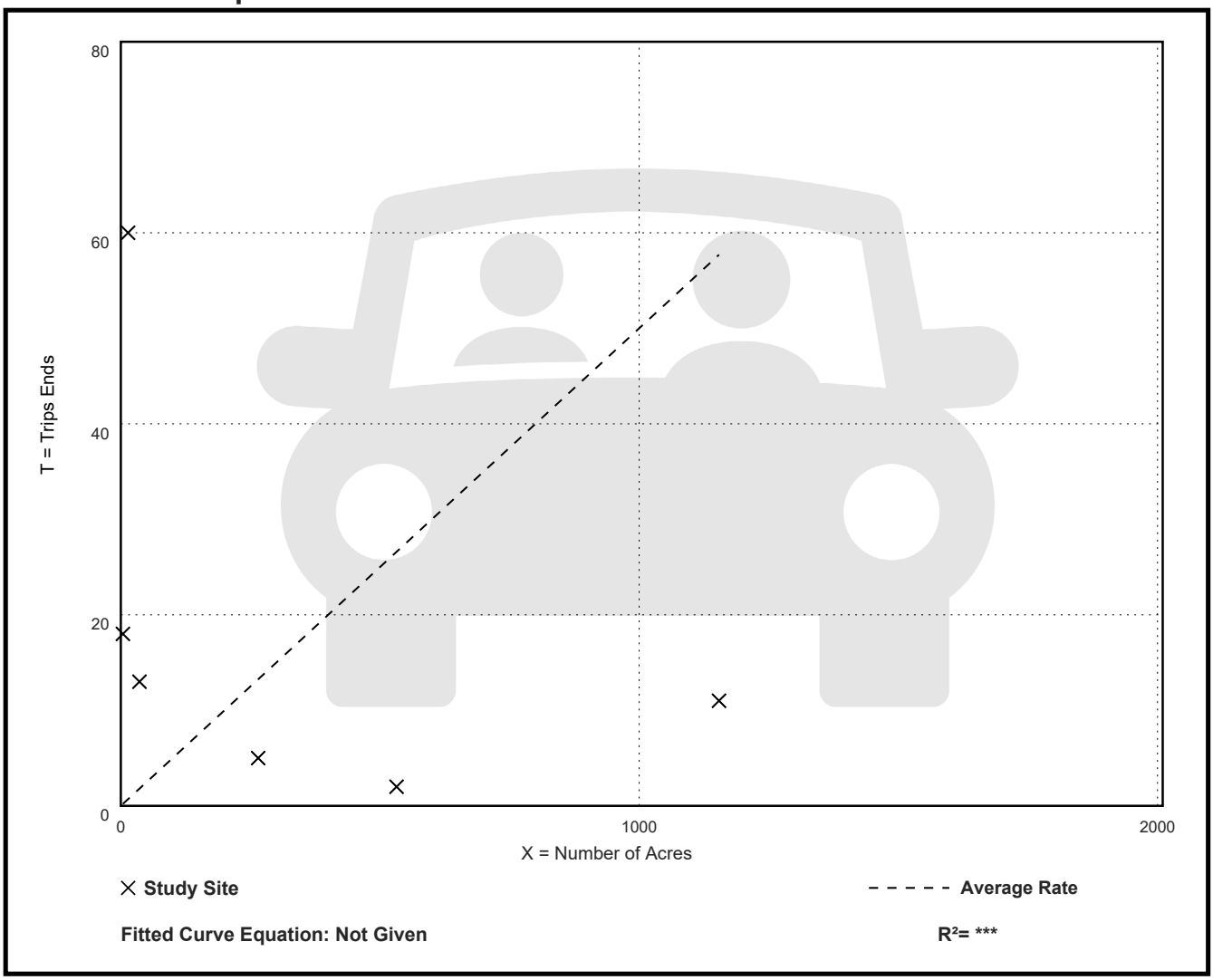
Public Park
(411)

Vehicle Trip Ends vs:	**Acres**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	6
Avg. Num. of Acres:	334
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.05	0.00 - 4.50	0.45

Data Plot and Equation



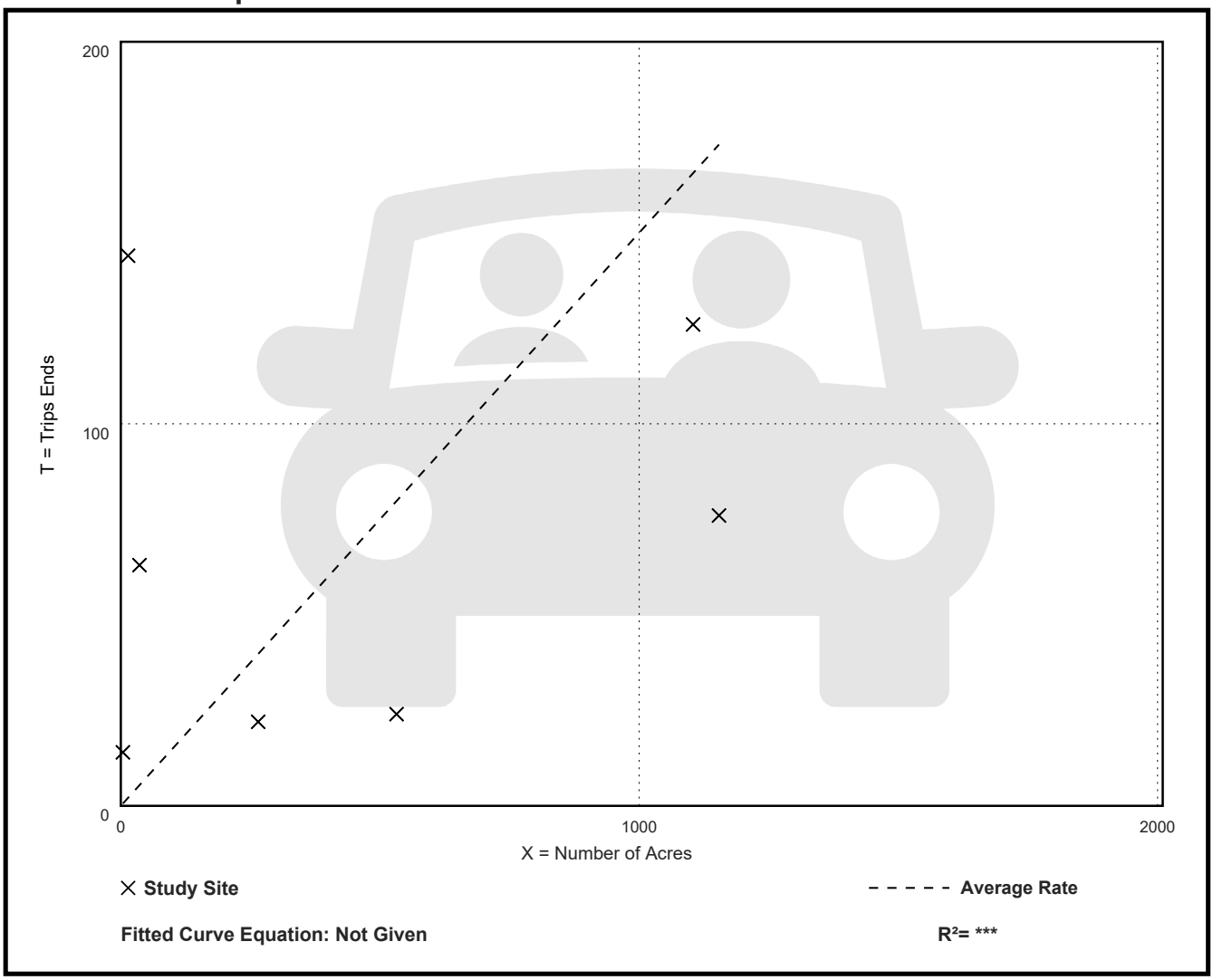
Public Park
(411)

Vehicle Trip Ends vs:	**Acres**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	7
Avg. Num. of Acres:	444
Directional Distribution:	57% entering, 43% exiting

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.15	0.05 - 10.29	0.77

Data Plot and Equation



Land Use: 495
Recreational Community Center

Description

A recreational community center is a stand-alone public facility similar to and including YMCAs. These facilities often include classes and clubs for adults and children, a day care or nursery school, meeting rooms and other social facilities, swimming pools and whirlpools, saunas, tennis, racquetball, handball, pickleball, basketball and volleyball courts, outdoor athletic fields/courts, exercise classes, weightlifting and gymnastics equipment, locker rooms, and a restaurant or snack bar. Public access is typically allowed, and a membership fee may be charged.

Additional Data

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), Arizona, Indiana, Minnesota, New Hampshire, Oregon, Pennsylvania, Tennessee, and Utah.

Source Numbers

410, 443, 571, 618, 705, 719, 850, 866, 971, 1055, 1219

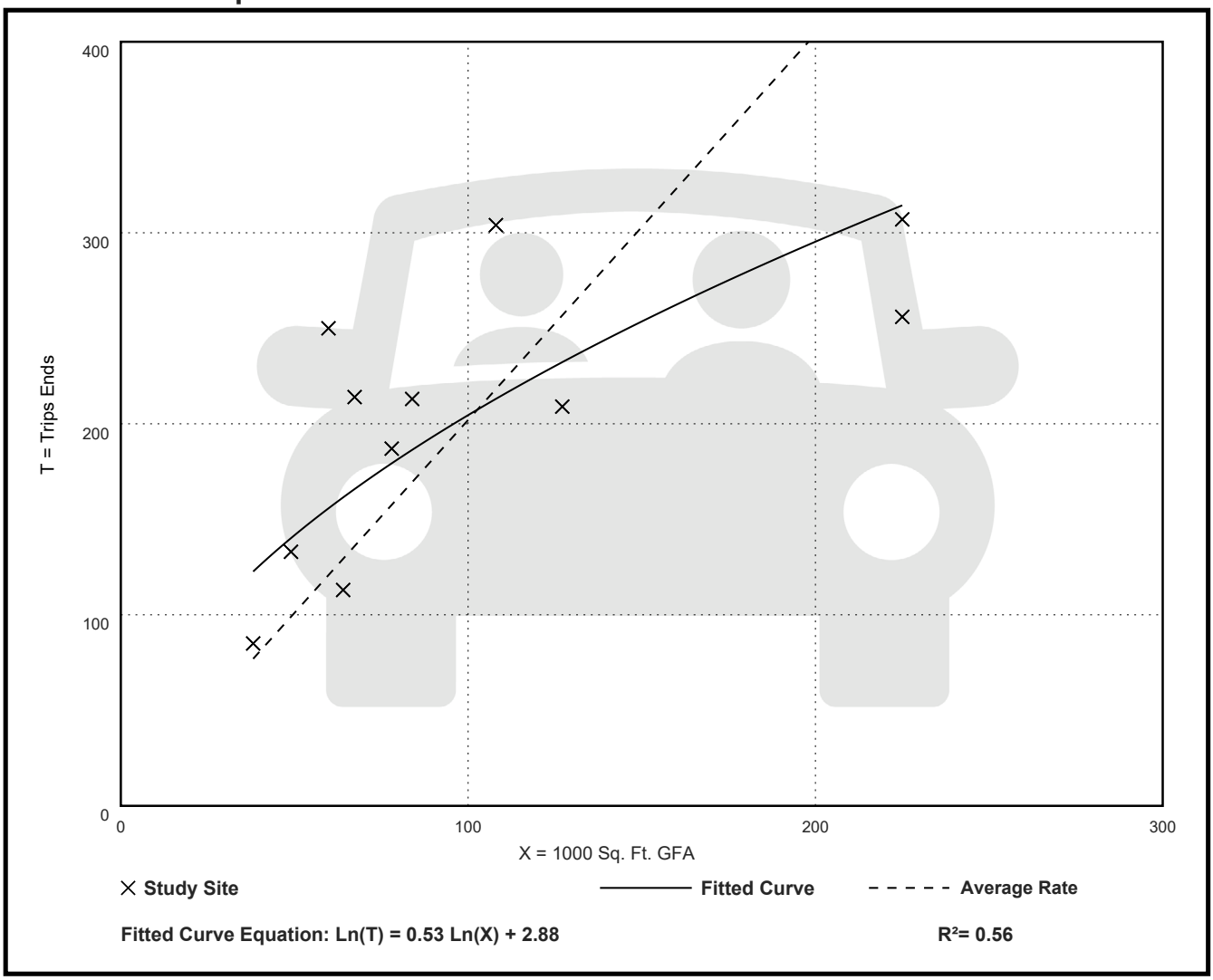
Recreational Community Center
(495)

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. 1000 Sq. Ft. GFA: 102
Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.02	1.14 - 4.18	0.88

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.53 Ln(X) + 2.88

R^2= 0.56

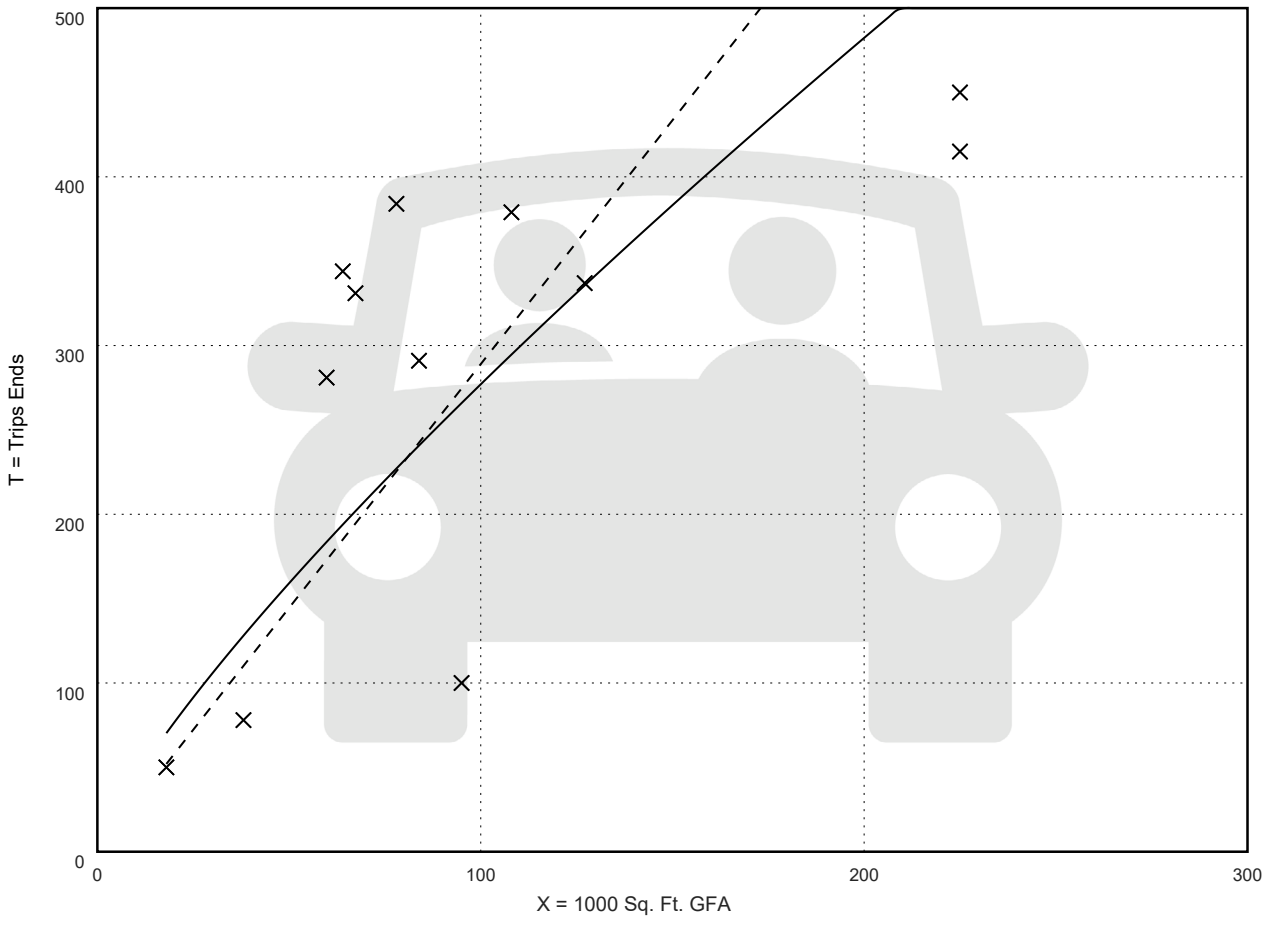
Recreational Community Center
(495)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	12
Avg. 1000 Sq. Ft. GFA:	99
Directional Distribution:	48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.89	1.05 - 5.37	1.37

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.80 Ln(X) + 1.94

R^2= 0.58

Land Use: 520
Elementary School

Description

An elementary school is a public school that typically serves students attending kindergarten through the fifth or sixth grade. An elementary school is usually centrally located in a residential community to facilitate student access. Bus service is commonly provided to students living beyond a specified distance from the school.

Additional Data

Elementary school students generally used school buses more than regular transit and were dropped off and picked up more than high school students, who were apt to walk longer distances, ride bicycles, or, in some cases, drive to school. The percentage of students at the sites who were transported to school via bus varied considerably. Some sites experienced higher than average trip rates because many students did not utilize the available school bus service. Due to the varied transit and school bus usage at these sites, it is desirable that future studies report additional detail on the percentage of students who were bused to school and the percentage that were dropped off and picked up.

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alabama, Arizona, British Columbia (CAN), California, Delaware, Florida, Hawaii, Minnesota, Montana, Nevada, North Carolina, Oregon, Pennsylvania, Texas, Utah, Washington, and West Virginia.

Source Numbers

390, 395, 533, 536, 572, 579, 583, 609, 611, 612, 613, 707, 852, 856, 858, 866, 896, 940, 1039, 1048, 1067, 1083, 1218, 1219, 1284

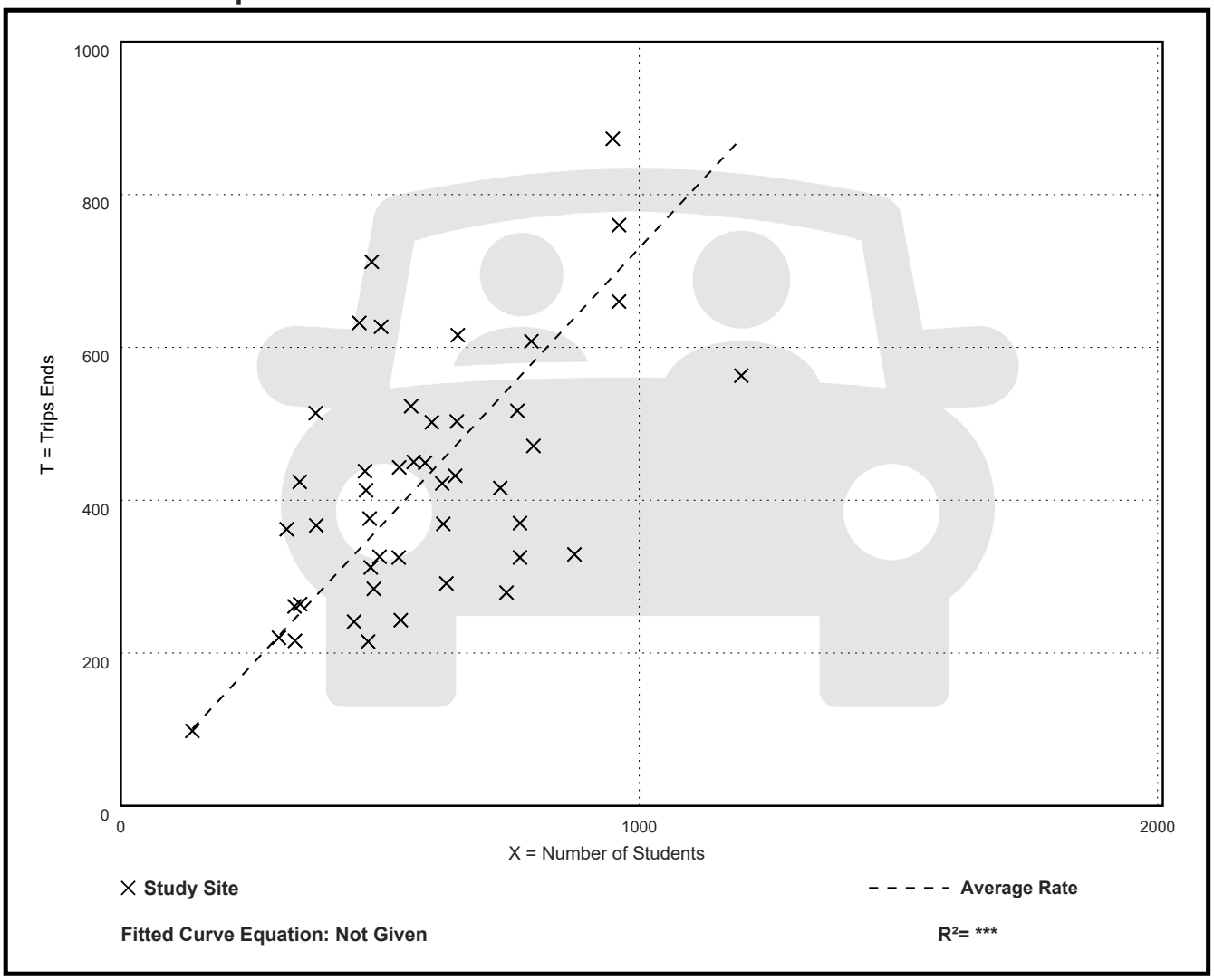
Elementary School
(520)

Vehicle Trip Ends vs:	**Students**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	45
Avg. Num. of Students:	582
Directional Distribution:	54% entering, 46% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.73	0.38 - 1.47	0.26

Data Plot and Equation



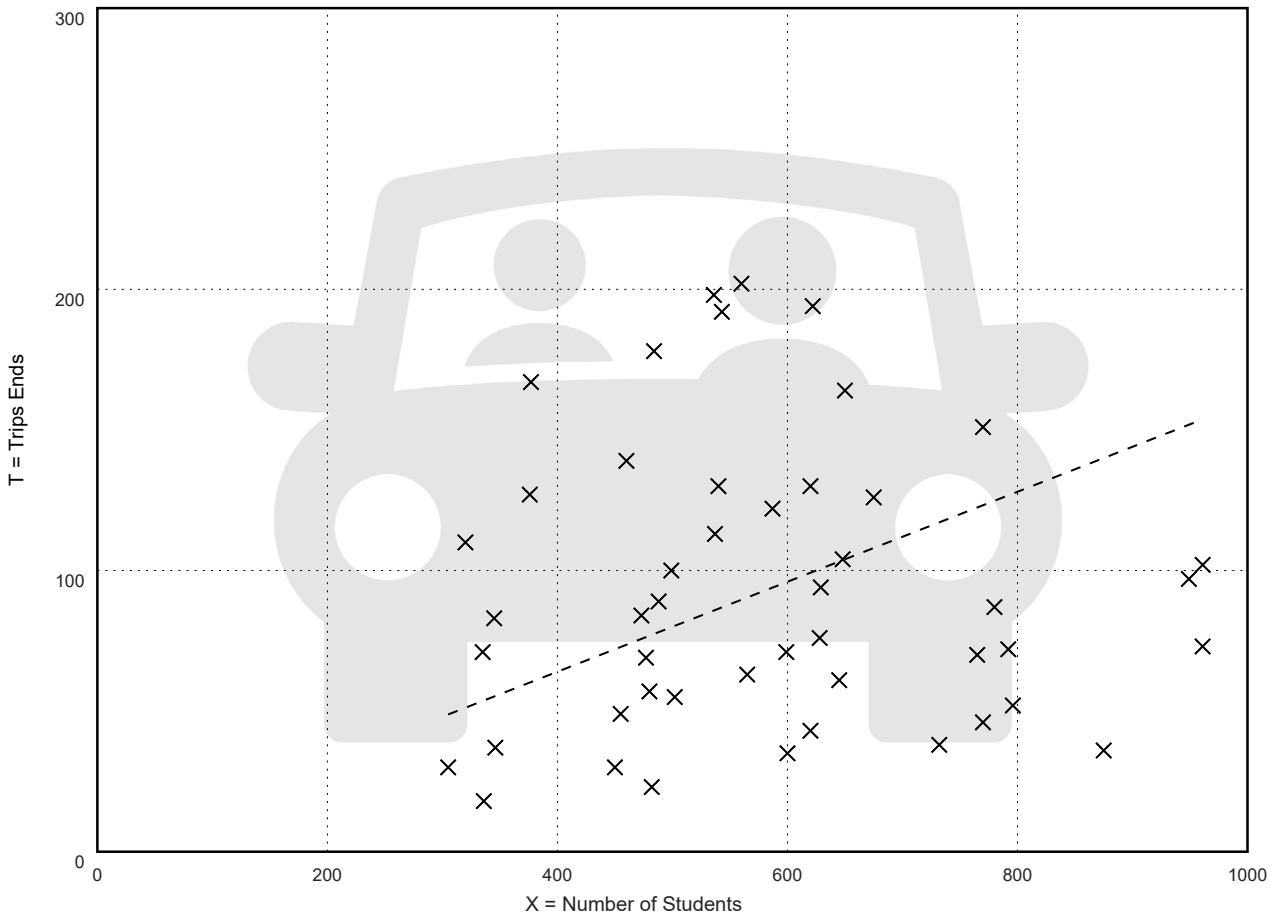
Elementary School
(520)

Vehicle Trip Ends vs:	**Students**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	48
Avg. Num. of Students:	582
Directional Distribution:	46% entering, 54% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.16	0.04 - 0.44	0.10

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

Land Use: 590
Library

Description

A library is a facility that houses shelved books and reading rooms or areas. A library may also provide meeting rooms. A library can be either a public or private entity.

Additional Data

The sites were surveyed in the 1990s and the 2000s in Florida, Georgia, New Jersey, and Oregon.

Source Numbers

407, 415, 444, 590

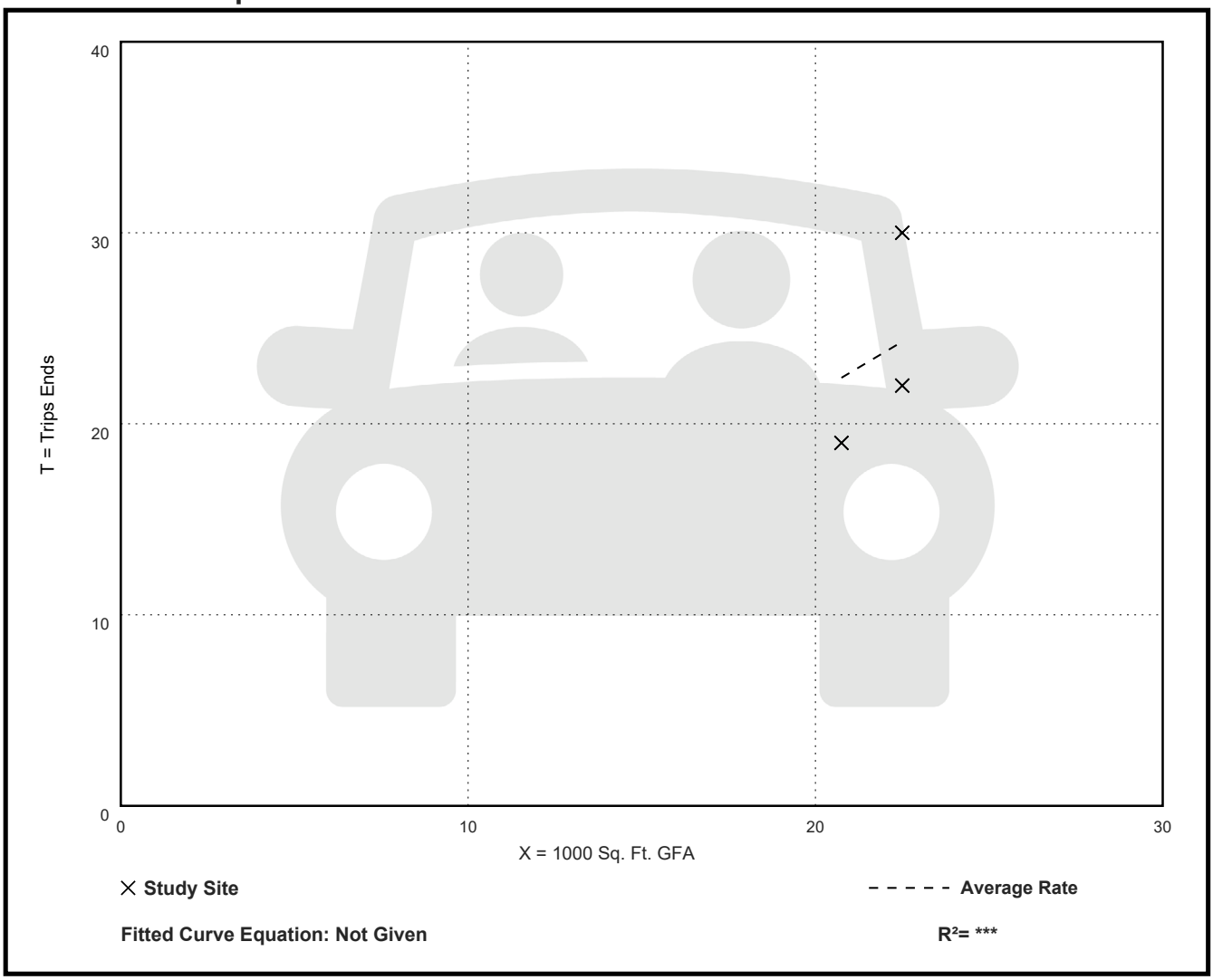
Library
(590)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	3
Avg. 1000 Sq. Ft. GFA:	22
Directional Distribution:	71% entering, 29% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.08	0.92 - 1.33	0.23

Data Plot and Equation



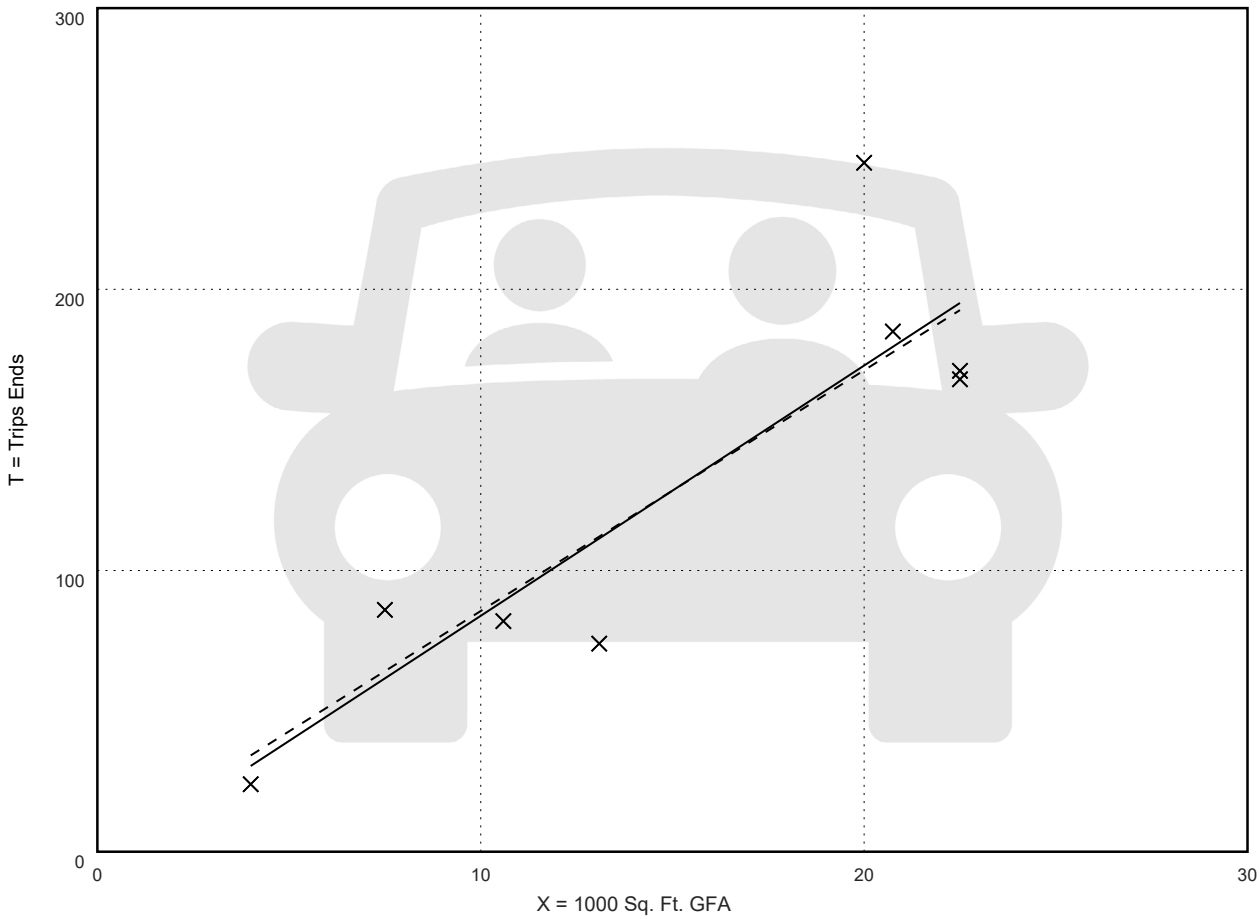
Library
(590)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	8
Avg. 1000 Sq. Ft. GFA:	15
Directional Distribution:	48% entering, 52% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
8.56	5.65 - 12.25	2.24

Data Plot and Equation



Fitted Curve Equation: T = 8.90(X) - 5.11

R^2= 0.77

Land Use: 770
Business Park

Description

A business park consists of a group of flex-type or incubator, one- or two-story buildings served by a common roadway system. The tenant space is flexible and lends itself to a variety of uses. The rear side of each building is often served by a garage door. Tenants may be start-up companies or small mature companies that require a variety of space. The space may include offices, retail and wholesale stores, restaurants, recreational areas, warehousing, manufacturing, light industrial, and scientific research functions. A common mix is 20 to 30 percent office/commercial and 70 to 80 percent industrial/warehousing. Industrial park (Land Use 130) is a related use.

Additional Data

The sites were surveyed in the 1990s, the 2000s, and the 2010s in New Jersey and Vermont.

Source Numbers

407, 715, 926

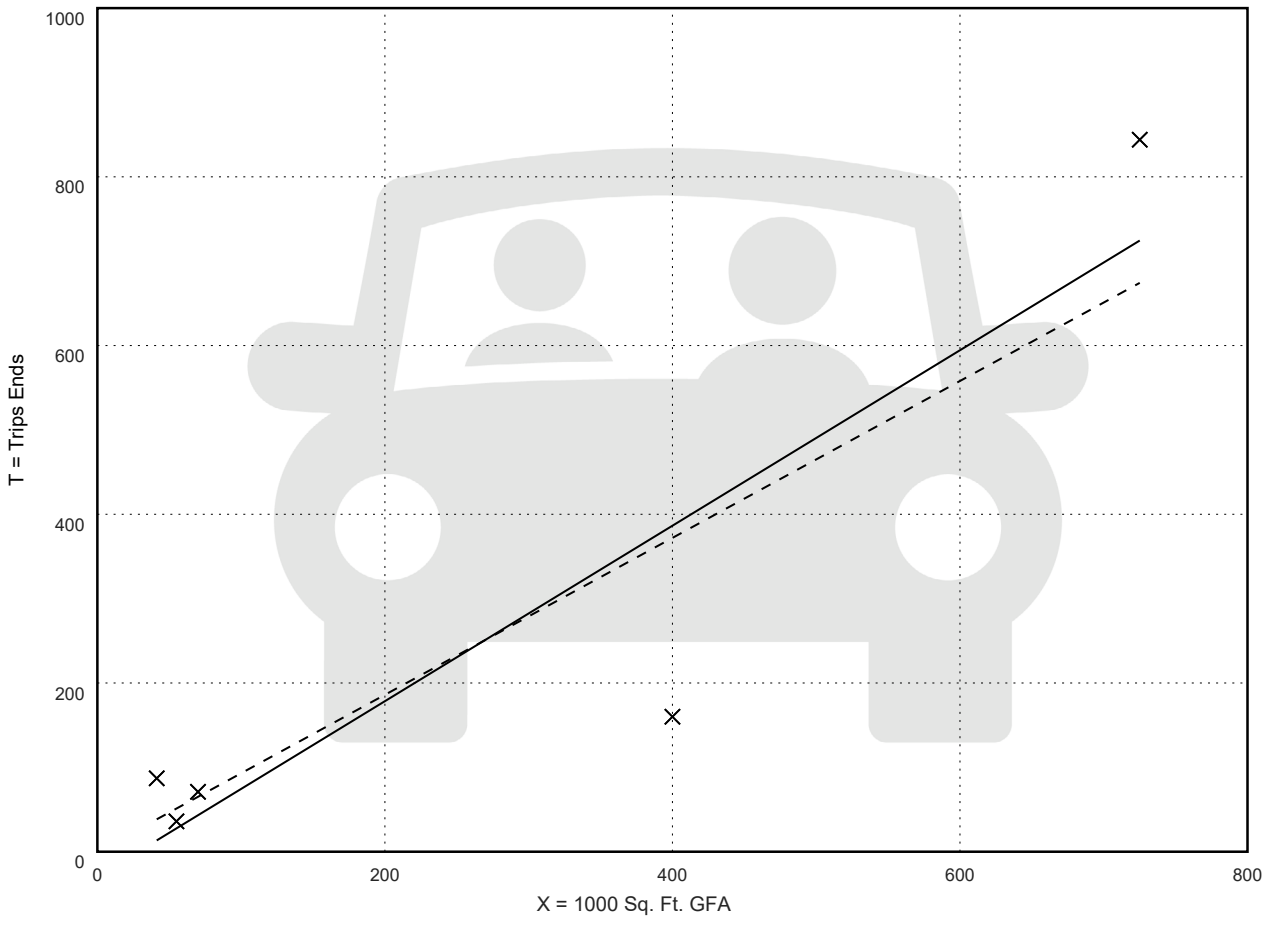
Business Park
(770)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	5
Avg. 1000 Sq. Ft. GFA:	258
Directional Distribution:	82% entering, 18% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.93	0.40 - 2.11	0.46

Data Plot and Equation



Fitted Curve Equation: T = 1.04(X) - 29.56

R^2= 0.85

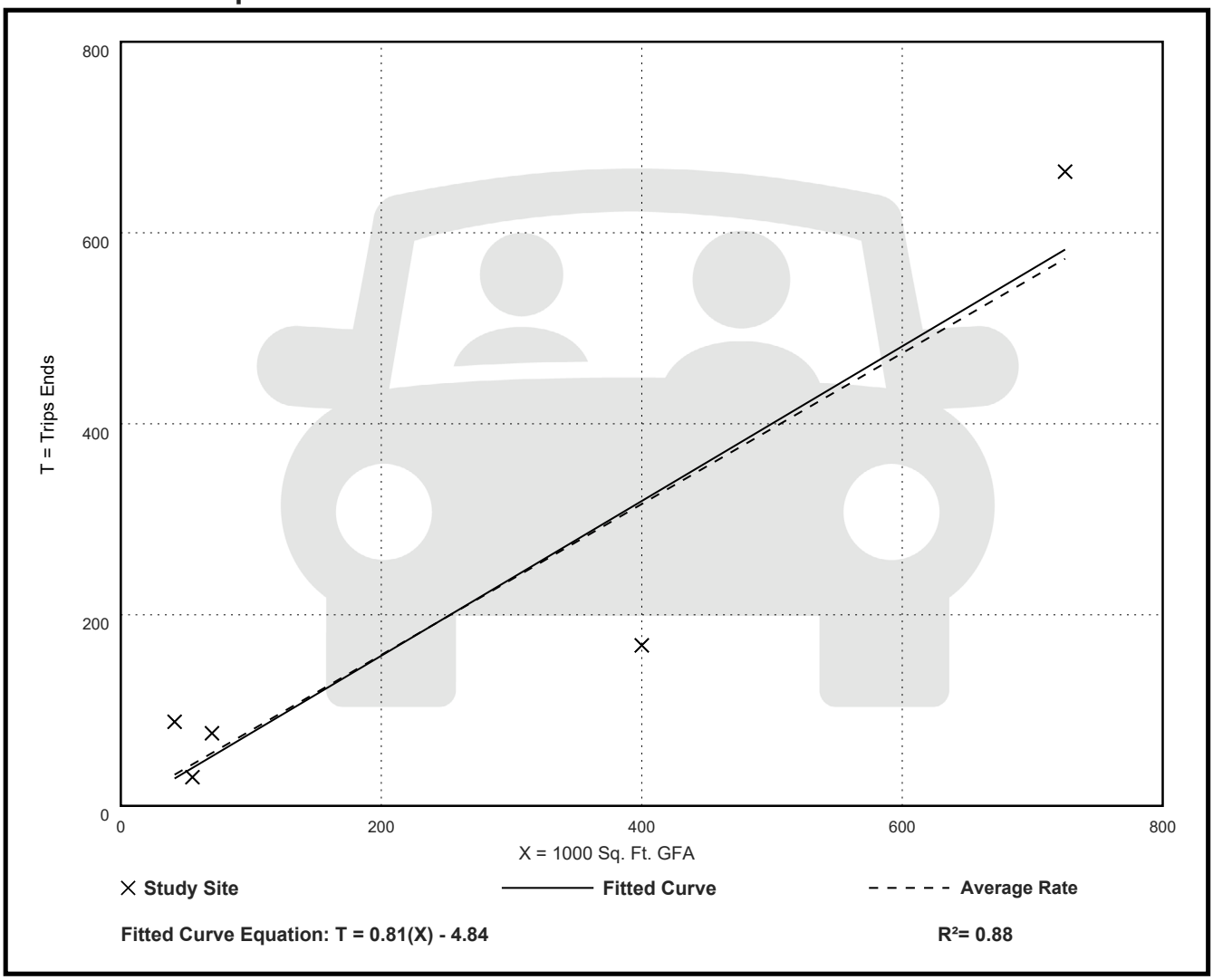
Business Park
(770)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	5
Avg. 1000 Sq. Ft. GFA:	258
Directional Distribution:	29% entering, 71% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.79	0.42 - 2.13	0.38

Data Plot and Equation



Fitted Curve Equation: T = 0.81(X) - 4.84

R^2= 0.88

Appendix F TAZs Land Use and Trip Generation

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 1

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
89 Units	Gross Trips	3	28	31	22	2	24
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**28**	**31**	**22**	**2**	**24**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
111 Units	Gross Trips	5	28	33	21	8	29
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**28**	**33**	**21**	**8**	**29**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
602 Units	Gross Trips	36	108	144	82	30	112
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**36**	**108**	**144**	**82**	**30**	**112**
	Gross Trips	44	164	208	125	40	165
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
802 Units	**Net Trips**	**44**	**164**	**208**	**125**	**40**	**165**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
19,000 sq. ft GFA	Gross Trips	10	7	17	86	90	176
	Mode Split Reduction (28%)	3	2	5	24	25	49
	Pass-by (34% PM)	0	0	0	22	22	44
	Net Trips	**7**	**5**	**12**	**40**	**43**	**83**
	Net Trips (90% Internal)	6	5	11	36	39	75
	Net Trips (10% External)	1	0	1	4	4	8
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
19,000 sq. ft GFA	Gross Trips	34	5	39	4	20	24
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**34**	**5**	**39**	**4**	**20**	**24**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	34	5	39	4	20	24
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	44	12	56	90	110	200
	Mode Split Reduction	3	2	5	24	25	49
	Pass-by	0	0	0	22	22	44
	Net Trips	**41**	**10**	**51**	**44**	**63**	**107**
	Net Trips (Internal)	6	5	11	36	39	75
	Net Trips (External)	35	5	40	8	24	32
Total Trips	Gross Trips	88	176	264	215	150	365
	Mode Split Reduction	3	2	5	24	25	49
	Pass-by	0	0	0	22	22	44
	Net Trips	**85**	**174**	**259**	**169**	**103**	**272**
	Net Trips (Internal)	6	5	11	36	39	75
	Net Trips (External)	79	169	248	133	64	197

2041-withGO Trip Generation Table

Report for TAZ: 1

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
159 Units	Gross Trips	5	48	53	44	5	49
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**48**	**53**	**44**	**5**	**49**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
199 Units	Gross Trips	7	43	50	37	13	50
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**7**	**43**	**50**	**37**	**13**	**50**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
1,084 Units	Gross Trips	23	183	206	115	52	167
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**23**	**183**	**206**	**115**	**52**	**167**
	Gross Trips	35	274	309	196	70	266
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,442 Units	**Net Trips**	**35**	**274**	**309**	**196**	**70**	**266**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
35,000 sq. ft GFA	Gross Trips	19	12	31	129	135	264
	Mode Split Reduction (33%)	6	4	10	43	45	88
	Pass-by (34% PM)	0	0	0	30	30	60
	Net Trips	**13**	**8**	**21**	**56**	**60**	**116**
	Net Trips (90% Internal)	12	7	19	50	54	104
	Net Trips (10% External)	1	1	2	6	6	12
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
35,000 sq. ft GFA	Gross Trips	44	6	50	6	31	37
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**44**	**6**	**50**	**6**	**31**	**37**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	44	6	50	6	31	37
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	63	18	81	135	166	301
	Mode Split Reduction	6	4	10	43	45	88
	Pass-by	0	0	0	30	30	60
	Net Trips	**57**	**14**	**71**	**62**	**91**	**153**
	Net Trips (Internal)	12	7	19	50	54	104
	Net Trips (External)	45	7	52	12	37	49
Total Trips	Gross Trips	98	292	390	331	236	567
	Mode Split Reduction	6	4	10	43	45	88
	Pass-by	0	0	0	30	30	60
	Net Trips	**92**	**288**	**380**	**258**	**161**	**419**
	Net Trips (Internal)	12	7	19	50	54	104
	Net Trips (External)	80	281	361	208	107	315

2041-withoutGO Trip Generation Table

Report for TAZ: 1

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
159 Units	Gross Trips	5	43	48	37	4	41
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**43**	**48**	**37**	**4**	**41**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
199 Units	Gross Trips	8	47	55	38	13	51
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**8**	**47**	**55**	**38**	**13**	**51**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
1,084 Units	Gross Trips	65	195	260	143	53	196
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**65**	**195**	**260**	**143**	**53**	**196**
	Gross Trips	78	285	363	218	70	288
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,442 Units	**Net Trips**	**78**	**285**	**363**	**218**	**70**	**288**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
35,000 sq. ft GFA	Gross Trips	19	12	31	129	135	264
	Mode Split Reduction (28%)	5	3	8	36	38	74
	Pass-by (34% PM)	0	0	0	34	34	68
	Net Trips	**14**	**9**	**23**	**59**	**63**	**122**
	Net Trips (90% Internal)	13	8	21	53	57	110
	Net Trips (10% External)	1	1	2	6	6	12
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
35,000 sq. ft GFA	Gross Trips	44	6	50	6	31	37
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**44**	**6**	**50**	**6**	**31**	**37**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	44	6	50	6	31	37
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	63	18	81	135	166	301
	Mode Split Reduction	5	3	8	36	38	74
	Pass-by	0	0	0	34	34	68
	Net Trips	**58**	**15**	**73**	**65**	**94**	**159**
	Net Trips (Internal)	13	8	21	53	57	110
	Net Trips (External)	45	7	52	12	37	49
Total Trips	Gross Trips	141	303	444	353	236	589
	Mode Split Reduction	5	3	8	36	38	74
	Pass-by	0	0	0	34	34	68
	Net Trips	**136**	**300**	**436**	**283**	**164**	**447**
	Net Trips (Internal)	13	8	21	53	57	110
	Net Trips (External)	123	292	415	230	107	337

2051-withGO Trip Generation Table

Report for TAZ: 1

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
177 Units	Gross Trips	6	52	58	48	6	54
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**52**	**58**	**48**	**6**	**54**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
221 Units	Gross Trips	8	47	55	41	14	55
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**8**	**47**	**55**	**41**	**14**	**55**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
1,204 Units	Gross Trips	25	202	227	126	57	183
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**25**	**202**	**227**	**126**	**57**	**183**
	Gross Trips	39	301	340	215	77	292
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,602 Units	**Net Trips**	**39**	**301**	**340**	**215**	**77**	**292**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
63,000 sq. ft GFA	Gross Trips	34	21	55	191	198	389
	Mode Split Reduction (33%)	11	7	18	63	65	128
	Pass-by (34% PM)	0	0	0	46	46	92
	Net Trips	**23**	**14**	**37**	**82**	**87**	**169**
	Net Trips (90% Internal)	21	13	34	74	78	152
	Net Trips (10% External)	2	1	3	8	9	17
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
63,000 sq. ft GFA	Gross Trips	61	10	71	10	50	60
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**61**	**10**	**71**	**10**	**50**	**60**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	61	10	71	10	50	60
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	95	31	126	201	248	449
	Mode Split Reduction	11	7	18	63	65	128
	Pass-by	0	0	0	46	46	92
	Net Trips	**84**	**24**	**108**	**92**	**137**	**229**
	Net Trips (Internal)	21	13	34	74	78	152
	Net Trips (External)	63	11	74	18	59	77
Total Trips	Gross Trips	134	332	466	416	325	741
	Mode Split Reduction	11	7	18	63	65	128
	Pass-by	0	0	0	46	46	92
	Net Trips	**123**	**325**	**448**	**307**	**214**	**521**
	Net Trips (Internal)	21	13	34	74	78	152
	Net Trips (External)	102	312	414	233	136	369

2051-withoutGO Trip Generation Table

Report for TAZ: 1

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
177 Units	Gross Trips	5	47	52	41	5	46
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**47**	**52**	**41**	**5**	**46**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
221 Units	Gross Trips	8	53	61	43	15	58
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**8**	**53**	**61**	**43**	**15**	**58**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
1,204 Units	Gross Trips	72	217	289	158	59	217
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**72**	**217**	**289**	**158**	**59**	**217**
	Gross Trips	85	317	402	242	79	321
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,602 Units	**Net Trips**	**85**	**317**	**402**	**242**	**79**	**321**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
63,000 sq. ft GFA	Gross Trips	34	21	55	191	199	390
	Mode Split Reduction (28%)	10	6	16	53	56	109
	Pass-by (34% PM)	0	0	0	48	48	96
	Net Trips	**24**	**15**	**39**	**90**	**95**	**185**
	Net Trips (90% Internal)	22	14	36	81	86	167
	Net Trips (10% External)	2	1	3	9	9	18
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
63,000 sq. ft GFA	Gross Trips	61	10	71	10	50	60
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**61**	**10**	**71**	**10**	**50**	**60**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	61	10	71	10	50	60
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	95	31	126	201	249	450
	Mode Split Reduction	10	6	16	53	56	109
	Pass-by	0	0	0	48	48	96
	Net Trips	**85**	**25**	**110**	**100**	**145**	**245**
	Net Trips (Internal)	22	14	36	81	86	167
	Net Trips (External)	63	11	74	19	59	78
Total Trips	Gross Trips	180	348	528	443	328	771
	Mode Split Reduction	10	6	16	53	56	109
	Pass-by	0	0	0	48	48	96
	Net Trips	**170**	**342**	**512**	**342**	**224**	**566**
	Net Trips (Internal)	22	14	36	81	86	167
	Net Trips (External)	148	328	476	261	138	399

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 2

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
722 Units	Gross Trips	43	130	173	97	36	133
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**43**	**130**	**173**	**97**	**36**	**133**
	Gross Trips	43	130	173	97	36	133
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
722 Units	**Net Trips**	**43**	**130**	**173**	**97**	**36**	**133**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
57,000 sq. ft GFA	Gross Trips	31	19	50	179	186	365
	Mode Split Reduction (28%)	9	5	14	50	52	102
	Pass-by (34% PM)	0	0	0	46	46	92
	Net Trips	**22**	**14**	**36**	**83**	**88**	**171**
	Net Trips (90% Internal)	20	13	33	75	79	154
	Net Trips (10% External)	2	1	3	8	9	17
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
28,000 sq. ft GFA	Gross Trips	39	6	45	5	26	31
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**39**	**6**	**45**	**5**	**26**	**31**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	39	6	45	5	26	31
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	70	25	95	184	212	396
	Mode Split Reduction	9	5	14	50	52	102
	Pass-by	0	0	0	46	46	92
	Net Trips	**61**	**20**	**81**	**88**	**114**	**202**
	Net Trips (Internal)	20	13	33	75	79	154
	Net Trips (External)	41	7	48	13	35	48
Total Trips	Gross Trips	113	155	268	281	248	529
	Mode Split Reduction	9	5	14	50	52	102
	Pass-by	0	0	0	46	46	92
	Net Trips	**104**	**150**	**254**	**185**	**150**	**335**
	Net Trips (Internal)	20	13	33	75	79	154
	Net Trips (External)	84	137	221	110	71	181

2041-withGO Trip Generation Table

Report for TAZ: 2

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
1,299 Units	Gross Trips	27	217	244	135	61	196
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**27**	**217**	**244**	**135**	**61**	**196**
	Gross Trips	27	217	244	135	61	196
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,299 Units	**Net Trips**	**27**	**217**	**244**	**135**	**61**	**196**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
105,000 sq. ft GFA	Gross Trips	57	35	92	267	278	545
	Mode Split Reduction (33%)	19	12	31	88	92	180
	Pass-by (34% PM)	0	0	0	64	64	128
	Net Trips	**38**	**23**	**61**	**115**	**122**	**237**
	Net Trips (90% Internal)	34	21	55	104	110	214
	Net Trips (10% External)	4	2	6	11	12	23
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
51,000 sq. ft GFA	Gross Trips	54	8	62	8	42	50
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**54**	**8**	**62**	**8**	**42**	**50**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	54	8	62	8	42	50
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	111	43	154	275	320	595
	Mode Split Reduction	19	12	31	88	92	180
	Pass-by	0	0	0	64	64	128
	Net Trips	**92**	**31**	**123**	**123**	**164**	**287**
	Net Trips (Internal)	34	21	55	104	110	214
	Net Trips (External)	58	10	68	19	54	73
Total Trips	Gross Trips	138	260	398	410	381	791
	Mode Split Reduction	19	12	31	88	92	180
	Pass-by	0	0	0	64	64	128
	Net Trips	**119**	**248**	**367**	**258**	**225**	**483**
	Net Trips (Internal)	34	21	55	104	110	214
	Net Trips (External)	85	227	312	154	115	269

2041-withoutGO Trip Generation Table

Report for TAZ: 2

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
1,299 Units	Gross Trips	78	234	312	170	63	233
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**78**	**234**	**312**	**170**	**63**	**233**
	Gross Trips	78	234	312	170	63	233
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,299 Units	**Net Trips**	**78**	**234**	**312**	**170**	**63**	**233**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
105,000 sq. ft GFA	Gross Trips	57	35	92	267	278	545
	Mode Split Reduction (28%)	16	10	26	75	78	153
	Pass-by (34% PM)	0	0	0	68	68	136
	Net Trips	**41**	**25**	**66**	**124**	**132**	**256**
	Net Trips (90% Internal)	37	23	60	112	119	231
	Net Trips (10% External)	4	2	6	12	13	25
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
51,000 sq. ft GFA	Gross Trips	54	8	62	8	42	50
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**54**	**8**	**62**	**8**	**42**	**50**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	54	8	62	8	42	50
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	111	43	154	275	320	595
	Mode Split Reduction	16	10	26	75	78	153
	Pass-by	0	0	0	68	68	136
	Net Trips	**95**	**33**	**128**	**132**	**174**	**306**
	Net Trips (Internal)	37	23	60	112	119	231
	Net Trips (External)	58	10	68	20	55	75
Total Trips	Gross Trips	189	277	466	445	383	828
	Mode Split Reduction	16	10	26	75	78	153
	Pass-by	0	0	0	68	68	136
	Net Trips	**173**	**267**	**440**	**302**	**237**	**539**
	Net Trips (Internal)	37	23	60	112	119	231
	Net Trips (External)	136	244	380	190	118	308

2051-withGO Trip Generation Table

Report for TAZ: 2

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
1,443 Units	Gross Trips	30	239	269	148	67	215
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**30**	**239**	**269**	**148**	**67**	**215**
	Gross Trips	30	239	269	148	67	215
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,443 Units	**Net Trips**	**30**	**239**	**269**	**148**	**67**	**215**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
191,000 sq. ft GFA	Gross Trips	104	64	168	397	413	810
	Mode Split Reduction (33%)	34	21	55	131	136	267
	Pass-by (34% PM)	0	0	0	94	94	188
	Net Trips	**70**	**43**	**113**	**172**	**183**	**355**
	Net Trips (90% Internal)	63	39	102	155	165	320
	Net Trips (10% External)	7	4	11	17	18	35
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
92,000 sq. ft GFA	Gross Trips	80	11	91	13	71	84
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**80**	**11**	**91**	**13**	**71**	**84**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	80	11	91	13	71	84
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	184	75	259	410	484	894
	Mode Split Reduction	34	21	55	131	136	267
	Pass-by	0	0	0	94	94	188
	Net Trips	**150**	**54**	**204**	**185**	**254**	**439**
	Net Trips (Internal)	63	39	102	155	165	320
	Net Trips (External)	87	15	102	30	89	119
Total Trips	Gross Trips	214	314	528	558	551	1109
	Mode Split Reduction	34	21	55	131	136	267
	Pass-by	0	0	0	94	94	188
	Net Trips	**180**	**293**	**473**	**333**	**321**	**654**
	Net Trips (Internal)	63	39	102	155	165	320
	Net Trips (External)	117	254	371	178	156	334

2051-withoutGO Trip Generation Table

Report for TAZ: 2

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
1,443 Units	Gross Trips	87	259	346	188	70	258
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**87**	**259**	**346**	**188**	**70**	**258**
	Gross Trips	87	259	346	188	70	258
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,443 Units	**Net Trips**	**87**	**259**	**346**	**188**	**70**	**258**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
191,000 sq. ft GFA	Gross Trips	104	64	168	397	413	810
	Mode Split Reduction (28%)	29	18	47	111	116	227
	Pass-by (34% PM)	0	0	0	100	100	200
	Net Trips	**75**	**46**	**121**	**186**	**197**	**383**
	Net Trips (90% Internal)	68	41	109	167	177	344
	Net Trips (10% External)	7	5	12	19	20	39
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
92,000 sq. ft GFA	Gross Trips	80	11	91	13	70	83
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**80**	**11**	**91**	**13**	**70**	**83**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	80	11	91	13	70	83
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	184	75	259	410	483	893
	Mode Split Reduction	29	18	47	111	116	227
	Pass-by	0	0	0	100	100	200
	Net Trips	**155**	**57**	**212**	**199**	**267**	**466**
	Net Trips (Internal)	68	41	109	167	177	344
	Net Trips (External)	87	16	103	32	90	122
Total Trips	Gross Trips	271	334	605	598	553	1151
	Mode Split Reduction	29	18	47	111	116	227
	Pass-by	0	0	0	100	100	200
	Net Trips	**242**	**316**	**558**	**387**	**337**	**724**
	Net Trips (Internal)	68	41	109	167	177	344
	Net Trips (External)	174	275	449	220	160	380

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 3

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
96 Units	Gross Trips	3	30	33	24	3	27
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**30**	**33**	**24**	**3**	**27**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
34 Units	Gross Trips	2	12	14	7	2	9
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**12**	**14**	**7**	**2**	**9**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
34 Units	Gross Trips	2	6	8	5	2	7
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**6**	**8**	**5**	**2**	**7**
	Gross Trips	7	48	55	36	7	43
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
164 Units	**Net Trips**	**7**	**48**	**55**	**36**	**7**	**43**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	7	48	55	36	7	43
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**7**	**48**	**55**	**36**	**7**	**43**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	7	48	55	36	7	43

2041-withGO Trip Generation Table

Report for TAZ: 3

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
172 Units	Gross Trips	6	51	57	47	5	52
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**51**	**57**	**47**	**5**	**52**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
61 Units	Gross Trips	2	13	15	12	5	17
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**13**	**15**	**12**	**5**	**17**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
61 Units	Gross Trips	2	12	14	9	5	14
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**12**	**14**	**9**	**5**	**14**
	Gross Trips	10	76	86	68	15	83
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
294 Units	**Net Trips**	**10**	**76**	**86**	**68**	**15**	**83**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	10	76	86	68	15	83
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**10**	**76**	**86**	**68**	**15**	**83**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	10	76	86	68	15	83

2041-withoutGO Trip Generation Table

Report for TAZ: 3

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
172 Units	Gross Trips	5	46	51	40	4	44
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**46**	**51**	**40**	**4**	**44**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
61 Units	Gross Trips	3	18	21	12	4	16
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**18**	**21**	**12**	**4**	**16**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
61 Units	Gross Trips	4	11	15	9	3	12
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**11**	**15**	**9**	**3**	**12**
	Gross Trips	12	75	87	61	11	72
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
294 Units	**Net Trips**	**12**	**75**	**87**	**61**	**11**	**72**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	12	75	87	61	11	72
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**12**	**75**	**87**	**61**	**11**	**72**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	12	75	87	61	11	72

2051-withGO Trip Generation Table

Report for TAZ: 3

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
191 Units	Gross Trips	6	56	62	52	6	58
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**56**	**62**	**52**	**6**	**58**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
68 Units	Gross Trips	3	14	17	14	4	18
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**14**	**17**	**14**	**4**	**18**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
68 Units	Gross Trips	2	14	16	10	5	15
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**14**	**16**	**10**	**5**	**15**
	Gross Trips	11	84	95	76	15	91
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
327 Units	**Net Trips**	**11**	**84**	**95**	**76**	**15**	**91**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	11	84	95	76	15	91
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**11**	**84**	**95**	**76**	**15**	**91**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	11	84	95	76	15	91

2051-withoutGO Trip Generation Table

Report for TAZ: 3

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
191 Units	Gross Trips	6	49	55	44	5	49
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**49**	**55**	**44**	**5**	**49**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
68 Units	Gross Trips	3	19	22	13	5	18
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**19**	**22**	**13**	**5**	**18**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
68 Units	Gross Trips	4	12	16	10	4	14
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**12**	**16**	**10**	**4**	**14**
	Gross Trips	13	80	93	67	14	81
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
327 Units	**Net Trips**	**13**	**80**	**93**	**67**	**14**	**81**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	13	80	93	67	14	81
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**13**	**80**	**93**	**67**	**14**	**81**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	13	80	93	67	14	81

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 4

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
70 Units	Gross Trips	3	23	26	18	2	20
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**23**	**26**	**18**	**2**	**20**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
35 Units	Gross Trips	2	12	14	7	2	9
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**12**	**14**	**7**	**2**	**9**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
78 Units	Gross Trips	5	14	19	12	4	16
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**14**	**19**	**12**	**4**	**16**
	Gross Trips	10	49	59	37	8	45
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
183 Units	**Net Trips**	**10**	**49**	**59**	**37**	**8**	**45**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	10	49	59	37	8	45
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**10**	**49**	**59**	**37**	**8**	**45**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	10	49	59	37	8	45

2041-withGO Trip Generation Table

Report for TAZ: 4

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
125 Units	Gross Trips	4	39	43	36	4	40
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**39**	**43**	**36**	**4**	**40**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
62 Units	Gross Trips	2	14	16	12	5	17
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**14**	**16**	**12**	**5**	**17**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
140 Units	Gross Trips	3	28	31	19	9	28
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**28**	**31**	**19**	**9**	**28**
	Gross Trips	9	81	90	67	18	85
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
327 Units	**Net Trips**	**9**	**81**	**90**	**67**	**18**	**85**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	9	81	90	67	18	85
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**9**	**81**	**90**	**67**	**18**	**85**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	9	81	90	67	18	85

2041-withoutGO Trip Generation Table

Report for TAZ: 4

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
125 Units	Gross Trips	4	36	40	30	3	33
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**36**	**40**	**30**	**3**	**33**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
62 Units	Gross Trips	3	18	21	12	4	16
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**18**	**21**	**12**	**4**	**16**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
140 Units	Gross Trips	8	26	34	20	8	28
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**8**	**26**	**34**	**20**	**8**	**28**
	Gross Trips	15	80	95	62	15	77
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
327 Units	**Net Trips**	**15**	**80**	**95**	**62**	**15**	**77**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	15	80	95	62	15	77
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**15**	**80**	**95**	**62**	**15**	**77**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	15	80	95	62	15	77

2051-withGO Trip Generation Table

Report for TAZ: 4

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
139 Units	Gross Trips	5	42	47	39	4	43
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**42**	**47**	**39**	**4**	**43**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
69 Units	Gross Trips	3	14	17	14	5	19
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**14**	**17**	**14**	**5**	**19**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
155 Units	Gross Trips	4	30	34	21	10	31
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**30**	**34**	**21**	**10**	**31**
	Gross Trips	12	86	98	74	19	93
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
363 Units	**Net Trips**	**12**	**86**	**98**	**74**	**19**	**93**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	12	86	98	74	19	93
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**12**	**86**	**98**	**74**	**19**	**93**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	12	86	98	74	19	93

2051-withoutGO Trip Generation Table

Report for TAZ: 4

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
139 Units	Gross Trips	4	39	43	33	4	37
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**39**	**43**	**33**	**4**	**37**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
69 Units	Gross Trips	3	20	23	13	5	18
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**20**	**23**	**13**	**5**	**18**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
155 Units	Gross Trips	9	28	37	23	8	31
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**9**	**28**	**37**	**23**	**8**	**31**
	Gross Trips	16	87	103	69	17	86
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
363 Units	**Net Trips**	**16**	**87**	**103**	**69**	**17**	**86**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	16	87	103	69	17	86
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**16**	**87**	**103**	**69**	**17**	**86**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	16	87	103	69	17	86

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 5

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
44 Units	Gross Trips	2	18	20	12	1	13
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**18**	**20**	**12**	**1**	**13**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	2	18	20	12	1	13
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
44 Units	**Net Trips**	**2**	**18**	**20**	**12**	**1**	**13**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	32	27	59	6	7	13
Total Trips	Gross Trips	298	270	568	67	66	133
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**215**	**199**	**414**	**52**	**48**	**100**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	34	45	79	18	8	26

2041-withGO Trip Generation Table

Report for TAZ: 5

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
79 Units	Gross Trips	3	26	29	24	2	26
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**26**	**29**	**24**	**2**	**26**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	3	26	29	24	2	26
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
79 Units	**Net Trips**	**3**	**26**	**29**	**24**	**2**	**26**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	32	27	59	6	7	13
Total Trips	Gross Trips	299	278	577	79	67	146
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**216**	**207**	**423**	**64**	**49**	**113**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	35	53	88	30	9	39

2041-withoutGO Trip Generation Table

Report for TAZ: 5

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
79 Units	Gross Trips	3	26	29	20	2	22
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**26**	**29**	**20**	**2**	**22**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	3	26	29	20	2	22
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
79 Units	**Net Trips**	**3**	**26**	**29**	**20**	**2**	**22**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	32	27	59	6	7	13
Total Trips	Gross Trips	299	278	577	75	67	142
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**216**	**207**	**423**	**60**	**49**	**109**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	35	53	88	26	9	35

2051-withGO Trip Generation Table

Report for TAZ: 5

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
88 Units	Gross Trips	3	29	32	26	3	29
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**29**	**32**	**26**	**3**	**29**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	3	29	32	26	3	29
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
88 Units	**Net Trips**	**3**	**29**	**32**	**26**	**3**	**29**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	32	27	59	6	7	13
Total Trips	Gross Trips	299	281	580	81	68	149
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**216**	**210**	**426**	**66**	**50**	**116**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	35	56	91	32	10	42

2051-withoutGO Trip Generation Table

Report for TAZ: 5

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
88 Units	Gross Trips	3	28	31	22	2	24
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**28**	**31**	**22**	**2**	**24**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	3	28	31	22	2	24
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
88 Units	**Net Trips**	**3**	**28**	**31**	**22**	**2**	**24**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
750 Students	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction (28%)	83	71	154	15	18	33
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (85% Internal)	181	154	335	34	40	74
	Net Trips (15% External)	32	27	59	6	7	13
Total Non-Residential	Gross Trips	296	252	548	55	65	120
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**213**	**181**	**394**	**40**	**47**	**87**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	32	27	59	6	7	13
Total Trips	Gross Trips	299	280	579	77	67	144
	Mode Split Reduction	83	71	154	15	18	33
	Pass-by	0	0	0	0	0	0
	Net Trips	**216**	**209**	**425**	**62**	**49**	**111**
	Net Trips (Internal)	181	154	335	34	40	74
	Net Trips (External)	35	55	90	28	9	37

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 6

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
34 Units	Gross Trips	2	16	18	10	1	11
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**16**	**18**	**10**	**1**	**11**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
9 Units	Gross Trips	1	7	8	2	1	3
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**7**	**8**	**2**	**1**	**3**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
9 Units	Gross Trips	1	1	2	2	1	3
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**1**	**2**	**2**	**1**	**3**
	Gross Trips	4	24	28	14	3	17
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
52 Units	**Net Trips**	**4**	**24**	**28**	**14**	**3**	**17**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	4	24	28	14	3	17
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**4**	**24**	**28**	**14**	**3**	**17**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	4	24	28	14	3	17

2041-withGO Trip Generation Table

Report for TAZ: 6

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
61 Units	Gross Trips	2	21	23	19	2	21
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**21**	**23**	**19**	**2**	**21**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
16 Units	Gross Trips	1	3	4	4	2	6
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**3**	**4**	**4**	**2**	**6**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
16 Units	Gross Trips	0	4	4	3	1	4
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**4**	**4**	**3**	**1**	**4**
	Gross Trips	3	28	31	26	5	31
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
93 Units	**Net Trips**	**3**	**28**	**31**	**26**	**5**	**31**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	3	28	31	26	5	31
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**3**	**28**	**31**	**26**	**5**	**31**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	3	28	31	26	5	31

2041-withoutGO Trip Generation Table

Report for TAZ: 6

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
61 Units	Gross Trips	2	22	24	16	2	18
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**22**	**24**	**16**	**2**	**18**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
16 Units	Gross Trips	1	8	9	3	1	4
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**8**	**9**	**3**	**1**	**4**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
16 Units	Gross Trips	1	3	4	3	1	4
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**3**	**4**	**3**	**1**	**4**
	Gross Trips	4	33	37	22	4	26
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
93 Units	**Net Trips**	**4**	**33**	**37**	**22**	**4**	**26**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	4	33	37	22	4	26
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**4**	**33**	**37**	**22**	**4**	**26**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	4	33	37	22	4	26

2051-withGO Trip Generation Table

Report for TAZ: 6

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
68 Units	Gross Trips	3	22	25	21	2	23
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**22**	**25**	**21**	**2**	**23**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
18 Units	Gross Trips	1	4	5	5	1	6
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**4**	**5**	**5**	**1**	**6**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
18 Units	Gross Trips	1	4	5	3	2	5
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**4**	**5**	**3**	**2**	**5**
	Gross Trips	5	30	35	29	5	34
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
104 Units	**Net Trips**	**5**	**30**	**35**	**29**	**5**	**34**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	5	30	35	29	5	34
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**5**	**30**	**35**	**29**	**5**	**34**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	5	30	35	29	5	34

2051-withoutGO Trip Generation Table

Report for TAZ: 6

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
68 Units	Gross Trips	3	23	26	18	2	20
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**23**	**26**	**18**	**2**	**20**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
18 Units	Gross Trips	1	9	10	3	1	4
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**9**	**10**	**3**	**1**	**4**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
18 Units	Gross Trips	1	3	4	3	1	4
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**3**	**4**	**3**	**1**	**4**
	Gross Trips	5	35	40	24	4	28
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
104 Units	**Net Trips**	**5**	**35**	**40**	**24**	**4**	**28**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	5	35	40	24	4	28
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**5**	**35**	**40**	**24**	**4**	**28**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	5	35	40	24	4	28

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 7

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
416 Units	Gross Trips	25	75	100	58	21	79
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**25**	**75**	**100**	**58**	**21**	**79**
	Gross Trips	25	75	100	58	21	79
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
416 Units	**Net Trips**	**25**	**75**	**100**	**58**	**21**	**79**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
52,000 sq. ft GFA	Gross Trips	28	18	46	168	175	343
	Mode Split Reduction (28%)	8	5	13	47	49	96
	Pass-by (34% PM)	0	0	0	42	42	84
	Net Trips	**20**	**13**	**33**	**79**	**84**	**163**
	Net Trips (90% Internal)	18	12	30	71	76	147
	Net Trips (10% External)	2	1	3	8	8	16
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
17,000 sq. ft GFA	Gross Trips	33	4	37	3	18	21
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**33**	**4**	**37**	**3**	**18**	**21**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	33	4	37	3	18	21
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	61	22	83	171	193	364
	Mode Split Reduction	8	5	13	47	49	96
	Pass-by	0	0	0	42	42	84
	Net Trips	**53**	**17**	**70**	**82**	**102**	**184**
	Net Trips (Internal)	18	12	30	71	76	147
	Net Trips (External)	35	5	40	11	26	37
Total Trips	Gross Trips	86	97	183	229	214	443
	Mode Split Reduction	8	5	13	47	49	96
	Pass-by	0	0	0	42	42	84
	Net Trips	**78**	**92**	**170**	**140**	**123**	**263**
	Net Trips (Internal)	18	12	30	71	76	147
	Net Trips (External)	60	80	140	69	47	116

2041-withGO Trip Generation Table

Report for TAZ: 7

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
749 Units	Gross Trips	16	130	146	84	37	121
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**16**	**130**	**146**	**84**	**37**	**121**
	Gross Trips	16	130	146	84	37	121
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
749 Units	**Net Trips**	**16**	**130**	**146**	**84**	**37**	**121**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
94,000 sq. ft GFA	Gross Trips	51	32	83	248	259	507
	Mode Split Reduction (33%)	17	11	28	82	85	167
	Pass-by (34% PM)	0	0	0	58	58	116
	Net Trips	**34**	**21**	**55**	**108**	**116**	**224**
	Net Trips (90% Internal)	31	19	50	97	104	201
	Net Trips (10% External)	3	2	5	11	12	23
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
31,000 sq. ft GFA	Gross Trips	41	6	47	5	28	33
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**41**	**6**	**47**	**5**	**28**	**33**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	41	6	47	5	28	33
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	92	38	130	253	287	540
	Mode Split Reduction	17	11	28	82	85	167
	Pass-by	0	0	0	58	58	116
	Net Trips	**75**	**27**	**102**	**113**	**144**	**257**
	Net Trips (Internal)	31	19	50	97	104	201
	Net Trips (External)	44	8	52	16	40	56
Total Trips	Gross Trips	108	168	276	337	324	661
	Mode Split Reduction	17	11	28	82	85	167
	Pass-by	0	0	0	58	58	116
	Net Trips	**91**	**157**	**248**	**197**	**181**	**378**
	Net Trips (Internal)	31	19	50	97	104	201
	Net Trips (External)	60	138	198	100	77	177

2041-withoutGO Trip Generation Table

Report for TAZ: 7

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
749 Units	Gross Trips	45	135	180	101	37	138
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**45**	**135**	**180**	**101**	**37**	**138**
	Gross Trips	45	135	180	101	37	138
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
749 Units	**Net Trips**	**45**	**135**	**180**	**101**	**37**	**138**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
94,000 sq. ft GFA	Gross Trips	51	32	83	248	259	507
	Mode Split Reduction (28%)	14	9	23	69	73	142
	Pass-by (34% PM)	0	0	0	64	64	128
	Net Trips	**37**	**23**	**60**	**115**	**122**	**237**
	Net Trips (90% Internal)	33	21	54	104	110	214
	Net Trips (10% External)	4	2	6	11	12	23
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
31,000 sq. ft GFA	Gross Trips	41	6	47	5	28	33
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**41**	**6**	**47**	**5**	**28**	**33**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	41	6	47	5	28	33
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	92	38	130	253	287	540
	Mode Split Reduction	14	9	23	69	73	142
	Pass-by	0	0	0	64	64	128
	Net Trips	**78**	**29**	**107**	**120**	**150**	**270**
	Net Trips (Internal)	33	21	54	104	110	214
	Net Trips (External)	45	8	53	16	40	56
Total Trips	Gross Trips	137	173	310	354	324	678
	Mode Split Reduction	14	9	23	69	73	142
	Pass-by	0	0	0	64	64	128
	Net Trips	**123**	**164**	**287**	**221**	**187**	**408**
	Net Trips (Internal)	33	21	54	104	110	214
	Net Trips (External)	90	143	233	117	77	194

2051-withGO Trip Generation Table

Report for TAZ: 7

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
832 Units	Gross Trips	18	143	161	92	41	133
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**18**	**143**	**161**	**92**	**41**	**133**
	Gross Trips	18	143	161	92	41	133
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
832 Units	**Net Trips**	**18**	**143**	**161**	**92**	**41**	**133**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
172,000 sq. ft GFA	Gross Trips	94	57	151	370	385	755
	Mode Split Reduction (33%)	31	19	50	122	127	249
	Pass-by (34% PM)	0	0	0	88	88	176
	Net Trips	**63**	**38**	**101**	**160**	**170**	**330**
	Net Trips (90% Internal)	57	34	91	144	153	297
	Net Trips (10% External)	6	4	10	16	17	33
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
57,000 sq. ft GFA	Gross Trips	58	8	66	9	46	55
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**58**	**8**	**66**	**9**	**46**	**55**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	58	8	66	9	46	55
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	152	65	217	379	431	810
	Mode Split Reduction	31	19	50	122	127	249
	Pass-by	0	0	0	88	88	176
	Net Trips	**121**	**46**	**167**	**169**	**216**	**385**
	Net Trips (Internal)	57	34	91	144	153	297
	Net Trips (External)	64	12	76	25	63	88
Total Trips	Gross Trips	170	208	378	471	472	943
	Mode Split Reduction	31	19	50	122	127	249
	Pass-by	0	0	0	88	88	176
	Net Trips	**139**	**189**	**328**	**261**	**257**	**518**
	Net Trips (Internal)	57	34	91	144	153	297
	Net Trips (External)	82	155	237	117	104	221

2051-withoutGO Trip Generation Table

Report for TAZ: 7

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
832 Units	Gross Trips	50	150	200	111	41	152
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**50**	**150**	**200**	**111**	**41**	**152**
	Gross Trips	50	150	200	111	41	152
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
832 Units	**Net Trips**	**50**	**150**	**200**	**111**	**41**	**152**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
172,000 sq. ft GFA	Gross Trips	94	57	151	370	385	755
	Mode Split Reduction (28%)	26	16	42	104	108	212
	Pass-by (34% PM)	0	0	0	94	94	188
	Net Trips	**68**	**41**	**109**	**172**	**183**	**355**
	Net Trips (90% Internal)	61	37	98	155	165	320
	Net Trips (10% External)	7	4	11	17	18	35
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
57,000 sq. ft GFA	Gross Trips	58	8	66	9	46	55
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**58**	**8**	**66**	**9**	**46**	**55**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	58	8	66	9	46	55
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	152	65	217	379	431	810
	Mode Split Reduction	26	16	42	104	108	212
	Pass-by	0	0	0	94	94	188
	Net Trips	**126**	**49**	**175**	**181**	**229**	**410**
	Net Trips (Internal)	61	37	98	155	165	320
	Net Trips (External)	65	12	77	26	64	90
Total Trips	Gross Trips	202	215	417	490	472	962
	Mode Split Reduction	26	16	42	104	108	212
	Pass-by	0	0	0	94	94	188
	Net Trips	**176**	**199**	**375**	**292**	**270**	**562**
	Net Trips (Internal)	61	37	98	155	165	320
	Net Trips (External)	115	162	277	137	105	242

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 8

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
29 Units	Gross Trips	2	15	17	9	1	10
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**15**	**17**	**9**	**1**	**10**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
15 Units	Gross Trips	1	8	9	3	1	4
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**8**	**9**	**3**	**1**	**4**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
15 Units	Gross Trips	1	3	4	2	1	3
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**3**	**4**	**2**	**1**	**3**
	Gross Trips	4	26	30	14	3	17
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
59 Units	**Net Trips**	**4**	**26**	**30**	**14**	**3**	**17**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
24,000 sq. ft GFA	Gross Trips	13	8	21	101	105	206
	Mode Split Reduction (28%)	4	2	6	28	29	57
	Pass-by (34% PM)	0	0	0	26	26	52
	Net Trips	**9**	**6**	**15**	**47**	**50**	**97**
	Net Trips (90% Internal)	8	5	13	42	45	87
	Net Trips (10% External)	1	1	2	5	5	10
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
8,000 sq. ft GFA	Gross Trips	27	4	31	2	12	14
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**27**	**4**	**31**	**2**	**12**	**14**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	27	4	31	2	12	14
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	40	12	52	103	117	220
	Mode Split Reduction	4	2	6	28	29	57
	Pass-by	0	0	0	26	26	52
	Net Trips	**36**	**10**	**46**	**49**	**62**	**111**
	Net Trips (Internal)	8	5	13	42	45	87
	Net Trips (External)	28	5	33	7	17	24
Total Trips	Gross Trips	44	38	82	117	120	237
	Mode Split Reduction	4	2	6	28	29	57
	Pass-by	0	0	0	26	26	52
	Net Trips	**40**	**36**	**76**	**63**	**65**	**128**
	Net Trips (Internal)	8	5	13	42	45	87
	Net Trips (External)	32	31	63	21	20	41

2041-withGO Trip Generation Table

Report for TAZ: 8

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
51 Units	Gross Trips	2	18	20	16	2	18
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**18**	**20**	**16**	**2**	**18**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
26 Units	Gross Trips	1	6	7	6	2	8
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**6**	**7**	**6**	**2**	**8**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
26 Units	Gross Trips	1	5	6	4	3	7
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**5**	**6**	**4**	**3**	**7**
	Gross Trips	4	29	33	26	7	33
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
103 Units	**Net Trips**	**4**	**29**	**33**	**26**	**7**	**33**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
43,000 sq. ft GFA	Gross Trips	23	15	38	148	155	303
	Mode Split Reduction (33%)	8	5	13	49	51	100
	Pass-by (34% PM)	0	0	0	36	36	72
	Net Trips	**15**	**10**	**25**	**63**	**68**	**131**
	Net Trips (90% Internal)	14	9	23	57	61	118
	Net Trips (10% External)	1	1	2	6	7	13
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
14,000 sq. ft GFA	Gross Trips	31	4	35	3	16	19
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**31**	**4**	**35**	**3**	**16**	**19**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	31	4	35	3	16	19
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	54	19	73	151	171	322
	Mode Split Reduction	8	5	13	49	51	100
	Pass-by	0	0	0	36	36	72
	Net Trips	**46**	**14**	**60**	**66**	**84**	**150**
	Net Trips (Internal)	14	9	23	57	61	118
	Net Trips (External)	32	5	37	9	23	32
Total Trips	Gross Trips	58	48	106	177	178	355
	Mode Split Reduction	8	5	13	49	51	100
	Pass-by	0	0	0	36	36	72
	Net Trips	**50**	**43**	**93**	**92**	**91**	**183**
	Net Trips (Internal)	14	9	23	57	61	118
	Net Trips (External)	36	34	70	35	30	65

2041-withoutGO Trip Generation Table

Report for TAZ: 8

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
51 Units	Gross Trips	2	20	22	14	2	16
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**20**	**22**	**14**	**2**	**16**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
26 Units	Gross Trips	2	10	12	5	2	7
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**10**	**12**	**5**	**2**	**7**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
26 Units	Gross Trips	2	4	6	4	2	6
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**4**	**6**	**4**	**2**	**6**
	Gross Trips	6	34	40	23	6	29
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
103 Units	**Net Trips**	**6**	**34**	**40**	**23**	**6**	**29**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
43,000 sq. ft GFA	Gross Trips	23	15	38	148	154	302
	Mode Split Reduction (28%)	6	4	10	41	43	84
	Pass-by (34% PM)	0	0	0	38	38	76
	Net Trips	**17**	**11**	**28**	**69**	**73**	**142**
	Net Trips (90% Internal)	15	10	25	62	66	128
	Net Trips (10% External)	2	1	3	7	7	14
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
14,000 sq. ft GFA	Gross Trips	31	4	35	3	16	19
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**31**	**4**	**35**	**3**	**16**	**19**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	31	4	35	3	16	19
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	54	19	73	151	170	321
	Mode Split Reduction	6	4	10	41	43	84
	Pass-by	0	0	0	38	38	76
	Net Trips	**48**	**15**	**63**	**72**	**89**	**161**
	Net Trips (Internal)	15	10	25	62	66	128
	Net Trips (External)	33	5	38	10	23	33
Total Trips	Gross Trips	60	53	113	174	176	350
	Mode Split Reduction	6	4	10	41	43	84
	Pass-by	0	0	0	38	38	76
	Net Trips	**54**	**49**	**103**	**95**	**95**	**190**
	Net Trips (Internal)	15	10	25	62	66	128
	Net Trips (External)	39	39	78	33	29	62

2051-withGO Trip Generation Table

Report for TAZ: 8

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
57 Units	Gross Trips	2	20	22	18	2	20
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**20**	**22**	**18**	**2**	**20**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
29 Units	Gross Trips	1	6	7	7	2	9
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**6**	**7**	**7**	**2**	**9**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
29 Units	Gross Trips	1	6	7	5	2	7
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**1**	**6**	**7**	**5**	**2**	**7**
	Gross Trips	4	32	36	30	6	36
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
115 Units	**Net Trips**	**4**	**32**	**36**	**30**	**6**	**36**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
79,000 sq. ft GFA	Gross Trips	43	27	70	222	230	452
	Mode Split Reduction (33%)	14	9	23	73	76	149
	Pass-by (34% PM)	0	0	0	52	52	104
	Net Trips	**29**	**18**	**47**	**97**	**102**	**199**
	Net Trips (90% Internal)	26	16	42	87	92	179
	Net Trips (10% External)	3	2	5	10	10	20
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
26,000 sq. ft GFA	Gross Trips	38	6	44	5	24	29
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**38**	**6**	**44**	**5**	**24**	**29**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	38	6	44	5	24	29
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	81	33	114	227	254	481
	Mode Split Reduction	14	9	23	73	76	149
	Pass-by	0	0	0	52	52	104
	Net Trips	**67**	**24**	**91**	**102**	**126**	**228**
	Net Trips (Internal)	26	16	42	87	92	179
	Net Trips (External)	41	8	49	15	34	49
Total Trips	Gross Trips	85	65	150	257	260	517
	Mode Split Reduction	14	9	23	73	76	149
	Pass-by	0	0	0	52	52	104
	Net Trips	**71**	**56**	**127**	**132**	**132**	**264**
	Net Trips (Internal)	26	16	42	87	92	179
	Net Trips (External)	45	40	85	45	40	85

2051-withoutGO Trip Generation Table

Report for TAZ: 8

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
57 Units	Gross Trips	2	21	23	15	2	17
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**21**	**23**	**15**	**2**	**17**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
29 Units	Gross Trips	2	11	13	6	2	8
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**11**	**13**	**6**	**2**	**8**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
29 Units	Gross Trips	2	5	7	5	2	7
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**5**	**7**	**5**	**2**	**7**
	Gross Trips	6	37	43	26	6	32
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
115 Units	**Net Trips**	**6**	**37**	**43**	**26**	**6**	**32**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
79,000 sq. ft GFA	Gross Trips	43	27	70	222	231	453
	Mode Split Reduction (28%)	12	8	20	62	65	127
	Pass-by (34% PM)	0	0	0	56	56	112
	Net Trips	**31**	**19**	**50**	**104**	**110**	**214**
	Net Trips (90% Internal)	28	17	45	94	99	193
	Net Trips (10% External)	3	2	5	10	11	21
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
26,000 sq. ft GFA	Gross Trips	38	6	44	5	24	29
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**38**	**6**	**44**	**5**	**24**	**29**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	38	6	44	5	24	29
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	81	33	114	227	255	482
	Mode Split Reduction	12	8	20	62	65	127
	Pass-by	0	0	0	56	56	112
	Net Trips	**69**	**25**	**94**	**109**	**134**	**243**
	Net Trips (Internal)	28	17	45	94	99	193
	Net Trips (External)	41	8	49	15	35	50
Total Trips	Gross Trips	87	70	157	253	261	514
	Mode Split Reduction	12	8	20	62	65	127
	Pass-by	0	0	0	56	56	112
	Net Trips	**75**	**62**	**137**	**135**	**140**	**275**
	Net Trips (Internal)	28	17	45	94	99	193
	Net Trips (External)	47	45	92	41	41	82

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 9

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
109 Units	Gross Trips	4	32	36	26	3	29
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**32**	**36**	**26**	**3**	**29**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
55 Units	Gross Trips	3	16	19	11	4	15
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**16**	**19**	**11**	**4**	**15**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
55 Units	Gross Trips	3	10	13	8	3	11
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**10**	**13**	**8**	**3**	**11**
	Gross Trips	10	58	68	45	10	55
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
219 Units	**Net Trips**	**10**	**58**	**68**	**45**	**10**	**55**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	10	58	68	45	10	55
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**10**	**58**	**68**	**45**	**10**	**55**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	10	58	68	45	10	55

2041-withGO Trip Generation Table

Report for TAZ: 9

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
195 Units	Gross Trips	6	57	63	53	6	59
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**57**	**63**	**53**	**6**	**59**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
98 Units	Gross Trips	4	21	25	19	7	26
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**21**	**25**	**19**	**7**	**26**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
98 Units	Gross Trips	2	20	22	14	7	21
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**2**	**20**	**22**	**14**	**7**	**21**
	Gross Trips	12	98	110	86	20	106
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
391 Units	**Net Trips**	**12**	**98**	**110**	**86**	**20**	**106**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	12	98	110	86	20	106
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**12**	**98**	**110**	**86**	**20**	**106**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	12	98	110	86	20	106

2041-withoutGO Trip Generation Table

Report for TAZ: 9

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
195 Units	Gross Trips	6	50	56	45	5	50
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**50**	**56**	**45**	**5**	**50**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
98 Units	Gross Trips	4	26	30	19	7	26
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**26**	**30**	**19**	**7**	**26**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
98 Units	Gross Trips	6	18	24	15	5	20
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**18**	**24**	**15**	**5**	**20**
	Gross Trips	16	94	110	79	17	96
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
391 Units	**Net Trips**	**16**	**94**	**110**	**79**	**17**	**96**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	16	94	110	79	17	96
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**16**	**94**	**110**	**79**	**17**	**96**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	16	94	110	79	17	96

2051-withGO Trip Generation Table

Report for TAZ: 9

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
217 Units	Gross Trips	7	62	69	58	6	64
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**7**	**62**	**69**	**58**	**6**	**64**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
109 Units	Gross Trips	4	23	27	21	7	28
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**4**	**23**	**27**	**21**	**7**	**28**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
109 Units	Gross Trips	3	21	24	16	7	23
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**3**	**21**	**24**	**16**	**7**	**23**
	Gross Trips	14	106	120	95	20	115
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
435 Units	**Net Trips**	**14**	**106**	**120**	**95**	**20**	**115**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	14	106	120	95	20	115
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**14**	**106**	**120**	**95**	**20**	**115**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	14	106	120	95	20	115

2051-withoutGO Trip Generation Table

Report for TAZ: 9

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
217 Units	Gross Trips	6	56	62	50	6	56
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**6**	**56**	**62**	**50**	**6**	**56**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
109 Units	Gross Trips	5	28	33	21	7	28
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**5**	**28**	**33**	**21**	**7**	**28**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
109 Units	Gross Trips	7	19	26	16	6	22
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**7**	**19**	**26**	**16**	**6**	**22**
	Gross Trips	18	103	121	87	19	106
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
435 Units	**Net Trips**	**18**	**103**	**121**	**87**	**19**	**106**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	0	0	0	0	0	0
Total Trips	Gross Trips	18	103	121	87	19	106
	Mode Split Reduction	0	0	0	0	0	0
	Pass-by	0	0	0	0	0	0
	Net Trips	**18**	**103**	**121**	**87**	**19**	**106**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	18	103	121	87	19	106

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 10

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
912 Units	Gross Trips	55	164	219	122	45	167
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**55**	**164**	**219**	**122**	**45**	**167**
	Gross Trips	55	164	219	122	45	167
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
912 Units	**Net Trips**	**55**	**164**	**219**	**122**	**45**	**167**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
113,000 sq. ft GFA	Gross Trips	62	37	99	281	292	573
	Mode Split Reduction (28%)	17	10	27	79	82	161
	Pass-by (34% PM)	0	0	0	72	72	144
	Net Trips	**45**	**27**	**72**	**130**	**138**	**268**
	Net Trips (90% Internal)	41	24	65	117	124	241
	Net Trips (10% External)	4	3	7	13	14	27
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
38,000 sq. ft GFA	Gross Trips	46	7	53	6	33	39
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**46**	**7**	**53**	**6**	**33**	**39**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	46	7	53	6	33	39
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	108	44	152	287	325	612
	Mode Split Reduction	17	10	27	79	82	161
	Pass-by	0	0	0	72	72	144
	Net Trips	**91**	**34**	**125**	**136**	**171**	**307**
	Net Trips (Internal)	41	24	65	117	124	241
	Net Trips (External)	50	10	60	19	47	66
Total Trips	Gross Trips	163	208	371	409	370	779
	Mode Split Reduction	17	10	27	79	82	161
	Pass-by	0	0	0	72	72	144
	Net Trips	**146**	**198**	**344**	**258**	**216**	**474**
	Net Trips (Internal)	41	24	65	117	124	241
	Net Trips (External)	105	174	279	141	92	233

2041-withGO Trip Generation Table

Report for TAZ: 10

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
1,641 Units	Gross Trips	33	270	303	166	74	240
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**33**	**270**	**303**	**166**	**74**	**240**
	Gross Trips	33	270	303	166	74	240
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,641 Units	**Net Trips**	**33**	**270**	**303**	**166**	**74**	**240**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
207,000 sq. ft GFA	Gross Trips	113	69	182	418	436	854
	Mode Split Reduction (33%)	37	23	60	138	144	282
	Pass-by (34% PM)	0	0	0	98	98	196
	Net Trips	**76**	**46**	**122**	**182**	**194**	**376**
	Net Trips (90% Internal)	68	41	109	164	175	339
	Net Trips (10% External)	8	5	13	18	19	37
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
69,000 sq. ft GFA	Gross Trips	65	10	75	10	55	65
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**65**	**10**	**75**	**10**	**55**	**65**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	65	10	75	10	55	65
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	178	79	257	428	491	919
	Mode Split Reduction	37	23	60	138	144	282
	Pass-by	0	0	0	98	98	196
	Net Trips	**141**	**56**	**197**	**192**	**249**	**441**
	Net Trips (Internal)	68	41	109	164	175	339
	Net Trips (External)	73	15	88	28	74	102
Total Trips	Gross Trips	211	349	560	594	565	1159
	Mode Split Reduction	37	23	60	138	144	282
	Pass-by	0	0	0	98	98	196
	Net Trips	**174**	**326**	**500**	**358**	**323**	**681**
	Net Trips (Internal)	68	41	109	164	175	339
	Net Trips (External)	106	285	391	194	148	342

2041-withoutGO Trip Generation Table

Report for TAZ: 10

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
1,641 Units	Gross Trips	98	296	394	212	79	291
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**98**	**296**	**394**	**212**	**79**	**291**
	Gross Trips	98	296	394	212	79	291
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,641 Units	**Net Trips**	**98**	**296**	**394**	**212**	**79**	**291**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
207,000 sq. ft GFA	Gross Trips	113	69	182	418	435	853
	Mode Split Reduction (28%)	32	19	51	117	122	239
	Pass-by (34% PM)	0	0	0	106	106	212
	Net Trips	**81**	**50**	**131**	**195**	**207**	**402**
	Net Trips (90% Internal)	73	45	118	176	186	362
	Net Trips (10% External)	8	5	13	19	21	40
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
69,000 sq. ft GFA	Gross Trips	65	10	75	10	54	64
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**65**	**10**	**75**	**10**	**54**	**64**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	65	10	75	10	54	64
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	178	79	257	428	489	917
	Mode Split Reduction	32	19	51	117	122	239
	Pass-by	0	0	0	106	106	212
	Net Trips	**146**	**60**	**206**	**205**	**261**	**466**
	Net Trips (Internal)	73	45	118	176	186	362
	Net Trips (External)	73	15	88	29	75	104
Total Trips	Gross Trips	276	375	651	640	568	1208
	Mode Split Reduction	32	19	51	117	122	239
	Pass-by	0	0	0	106	106	212
	Net Trips	**244**	**356**	**600**	**417**	**340**	**757**
	Net Trips (Internal)	73	45	118	176	186	362
	Net Trips (External)	171	311	482	241	154	395

2051-withGO Trip Generation Table

Report for TAZ: 10

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
1,823 Units	Gross Trips	37	298	335	181	82	263
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**37**	**298**	**335**	**181**	**82**	**263**
	Gross Trips	37	298	335	181	82	263
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,823 Units	**Net Trips**	**37**	**298**	**335**	**181**	**82**	**263**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
377,000 sq. ft GFA	Gross Trips	206	126	332	621	647	1268
	Mode Split Reduction (33%)	68	42	110	205	214	419
	Pass-by (34% PM)	0	0	0	146	146	292
	Net Trips	**138**	**84**	**222**	**270**	**287**	**557**
	Net Trips (90% Internal)	124	76	200	243	258	501
	Net Trips (10% External)	14	8	22	27	29	56
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
126,000 sq. ft GFA	Gross Trips	101	15	116	18	94	112
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**101**	**15**	**116**	**18**	**94**	**112**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	101	15	116	18	94	112
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	307	141	448	639	741	1380
	Mode Split Reduction	68	42	110	205	214	419
	Pass-by	0	0	0	146	146	292
	Net Trips	**239**	**99**	**338**	**288**	**381**	**669**
	Net Trips (Internal)	124	76	200	243	258	501
	Net Trips (External)	115	23	138	45	123	168
Total Trips	Gross Trips	344	439	783	820	823	1643
	Mode Split Reduction	68	42	110	205	214	419
	Pass-by	0	0	0	146	146	292
	Net Trips	**276**	**397**	**673**	**469**	**463**	**932**
	Net Trips (Internal)	124	76	200	243	258	501
	Net Trips (External)	152	321	473	226	205	431

2051-withoutGO Trip Generation Table

Report for TAZ: 10

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
1,823 Units	Gross Trips	109	329	438	235	87	322
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**109**	**329**	**438**	**235**	**87**	**322**
	Gross Trips	109	329	438	235	87	322
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
1,823 Units	**Net Trips**	**109**	**329**	**438**	**235**	**87**	**322**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
377,000 sq. ft GFA	Gross Trips	206	126	332	621	647	1268
	Mode Split Reduction (28%)	58	35	93	174	181	355
	Pass-by (34% PM)	0	0	0	156	156	312
	Net Trips	**148**	**91**	**239**	**291**	**310**	**601**
	Net Trips (90% Internal)	133	82	215	262	279	541
	Net Trips (10% External)	15	9	24	29	31	60
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
126,000 sq. ft GFA	Gross Trips	101	15	116	18	94	112
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**101**	**15**	**116**	**18**	**94**	**112**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	101	15	116	18	94	112
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	307	141	448	639	741	1380
	Mode Split Reduction	58	35	93	174	181	355
	Pass-by	0	0	0	156	156	312
	Net Trips	**249**	**106**	**355**	**309**	**404**	**713**
	Net Trips (Internal)	133	82	215	262	279	541
	Net Trips (External)	116	24	140	47	125	172
Total Trips	Gross Trips	416	470	886	874	828	1702
	Mode Split Reduction	58	35	93	174	181	355
	Pass-by	0	0	0	156	156	312
	Net Trips	**358**	**435**	**793**	**544**	**491**	**1035**
	Net Trips (Internal)	133	82	215	262	279	541
	Net Trips (External)	225	353	578	282	212	494

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 11

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
44,000 sq. ft GFA	Gross Trips	13	3	16	9	22	31
	Mode Split Reduction (28%)	4	1	5	3	6	9
	Net Trips	**9**	**2**	**11**	**6**	**16**	**22**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	9	2	11	6	16	22
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (28%)	46	23	69	60	65	125
	Net Trips	**118**	**61**	**179**	**153**	**166**	**319**
	Net Trips (20% Internal)	23	13	36	31	34	65
	Net Trips (80% External)	95	48	143	122	132	254
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	177	88	265	223	254	477
	Mode Split Reduction	50	24	74	63	71	134
	Pass-by	0	0	0	0	0	0
	Net Trips	**127**	**64**	**191**	**160**	**183**	**343**
	Net Trips (Internal)	23	13	36	31	34	65
	Net Trips (External)	104	51	155	129	149	278
Total Trips	Gross Trips	177	88	265	223	254	477
	Mode Split Reduction	50	24	74	63	71	134
	Pass-by	0	0	0	0	0	0
	Net Trips	**127**	**64**	**191**	**160**	**183**	**343**
	Net Trips (Internal)	23	13	36	31	34	65
	Net Trips (External)	104	51	155	129	149	278

2041-withGO Trip Generation Table

Report for TAZ: 11

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
80,000 sq. ft GFA	Gross Trips	44	10	54	17	43	60
	Mode Split Reduction (33%)	15	3	18	6	14	20
	Net Trips	**29**	**7**	**36**	**11**	**29**	**40**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	29	7	36	11	29	40
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (33%)	54	27	81	70	76	146
	Net Trips	**110**	**57**	**167**	**143**	**155**	**298**
	Net Trips (20% Internal)	22	12	34	29	31	60
	Net Trips (80% External)	88	45	133	114	124	238
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	208	95	303	231	275	506
	Mode Split Reduction	69	30	99	76	90	166
	Pass-by	0	0	0	0	0	0
	Net Trips	**139**	**65**	**204**	**155**	**185**	**340**
	Net Trips (Internal)	22	12	34	29	31	60
	Net Trips (External)	117	53	170	126	154	280
Total Trips	Gross Trips	208	95	303	231	275	506
	Mode Split Reduction	69	30	99	76	90	166
	Pass-by	0	0	0	0	0	0
	Net Trips	**139**	**65**	**204**	**155**	**185**	**340**
	Net Trips (Internal)	22	12	34	29	31	60
	Net Trips (External)	117	53	170	126	154	280

2041-withoutGO Trip Generation Table

Report for TAZ: 11

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
80,000 sq. ft GFA	Gross Trips	44	10	54	17	43	60
	Mode Split Reduction (28%)	12	3	15	5	12	17
	Net Trips	**32**	**7**	**39**	**12**	**31**	**43**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	32	7	39	12	31	43
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (28%)	46	23	69	60	65	125
	Net Trips	**118**	**61**	**179**	**153**	**166**	**319**
	Net Trips (20% Internal)	23	13	36	31	34	65
	Net Trips (80% External)	95	48	143	122	132	254
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	208	95	303	231	275	506
	Mode Split Reduction	58	26	84	65	77	142
	Pass-by	0	0	0	0	0	0
	Net Trips	**150**	**69**	**219**	**166**	**198**	**364**
	Net Trips (Internal)	23	13	36	31	34	65
	Net Trips (External)	127	56	183	135	164	299
Total Trips	Gross Trips	208	95	303	231	275	506
	Mode Split Reduction	58	26	84	65	77	142
	Pass-by	0	0	0	0	0	0
	Net Trips	**150**	**69**	**219**	**166**	**198**	**364**
	Net Trips (Internal)	23	13	36	31	34	65
	Net Trips (External)	127	56	183	135	164	299

2051-withGO Trip Generation Table

Report for TAZ: 11

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
145,000 sq. ft GFA	Gross Trips	99	22	121	33	80	113
	Mode Split Reduction (33%)	33	7	40	11	26	37
	Net Trips	**66**	**15**	**81**	**22**	**54**	**76**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	66	15	81	22	54	76
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (33%)	54	27	81	70	76	146
	Net Trips	**110**	**57**	**167**	**143**	**155**	**298**
	Net Trips (20% Internal)	22	12	34	29	31	60
	Net Trips (80% External)	88	45	133	114	124	238
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	263	107	370	247	312	559
	Mode Split Reduction	87	34	121	81	102	183
	Pass-by	0	0	0	0	0	0
	Net Trips	**176**	**73**	**249**	**166**	**210**	**376**
	Net Trips (Internal)	22	12	34	29	31	60
	Net Trips (External)	154	61	215	137	179	316
Total Trips	Gross Trips	263	107	370	247	312	559
	Mode Split Reduction	87	34	121	81	102	183
	Pass-by	0	0	0	0	0	0
	Net Trips	**176**	**73**	**249**	**166**	**210**	**376**
	Net Trips (Internal)	22	12	34	29	31	60
	Net Trips (External)	154	61	215	137	179	316

2051-withoutGO Trip Generation Table

Report for TAZ: 11

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
145,000 sq. ft GFA	Gross Trips	99	22	121	33	80	113
	Mode Split Reduction (28%)	28	6	34	9	22	31
	Net Trips	**71**	**16**	**87**	**24**	**58**	**82**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	71	16	87	24	58	82
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
142,000 sq. ft GFA	Gross Trips	164	84	248	213	231	444
	Mode Split Reduction (28%)	46	23	69	60	65	125
	Net Trips	**118**	**61**	**179**	**153**	**166**	**319**
	Net Trips (20% Internal)	23	13	36	31	34	65
	Net Trips (80% External)	95	48	143	122	132	254
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
14.83 acres	Gross Trips	0	1	1	1	1	2
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**1**	**1**	**1**	**1**	**2**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	1	1	1	1	2
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	263	107	370	247	312	559
	Mode Split Reduction	74	29	103	69	87	156
	Pass-by	0	0	0	0	0	0
	Net Trips	**189**	**78**	**267**	**178**	**225**	**403**
	Net Trips (Internal)	23	13	36	31	34	65
	Net Trips (External)	166	65	231	147	191	338
Total Trips	Gross Trips	263	107	370	247	312	559
	Mode Split Reduction	74	29	103	69	87	156
	Pass-by	0	0	0	0	0	0
	Net Trips	**189**	**78**	**267**	**178**	**225**	**403**
	Net Trips (Internal)	23	13	36	31	34	65
	Net Trips (External)	166	65	231	147	191	338

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 12

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
50,000 sq. ft GFA	Gross Trips	18	4	22	10	25	35
	Mode Split Reduction (28%)	5	1	6	3	7	10
	Net Trips	**13**	**3**	**16**	**7**	**18**	**25**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	13	3	16	7	18	25
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
255,000 sq. ft GFA	Gross Trips	124	38	162	43	112	155
	Mode Split Reduction (28%)	35	11	46	12	31	43
	Net Trips	**89**	**27**	**116**	**31**	**81**	**112**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	89	27	116	31	81	112
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	142	42	184	53	137	190
	Mode Split Reduction	40	12	52	15	38	53
	Pass-by	0	0	0	0	0	0
	Net Trips	**102**	**30**	**132**	**38**	**99**	**137**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	102	30	132	38	99	137
Total Trips	Gross Trips	142	42	184	53	137	190
	Mode Split Reduction	40	12	52	15	38	53
	Pass-by	0	0	0	0	0	0
	Net Trips	**102**	**30**	**132**	**38**	**99**	**137**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	102	30	132	38	99	137

2041-withGO Trip Generation Table

Report for TAZ: 12

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
91,000 sq. ft GFA	Gross Trips	53	12	65	20	49	69
	Mode Split Reduction (33%)	17	4	21	7	16	23
	Net Trips	**36**	**8**	**44**	**13**	**33**	**46**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	36	8	44	13	33	46
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
468,000 sq. ft GFA	Gross Trips	147	44	191	53	136	189
	Mode Split Reduction (33%)	49	15	64	17	45	62
	Net Trips	**98**	**29**	**127**	**36**	**91**	**127**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	98	29	127	36	91	127
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	200	56	256	73	185	258
	Mode Split Reduction	66	19	85	24	61	85
	Pass-by	0	0	0	0	0	0
	Net Trips	**134**	**37**	**171**	**49**	**124**	**173**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	134	37	171	49	124	173
Total Trips	Gross Trips	200	56	256	73	185	258
	Mode Split Reduction	66	19	85	24	61	85
	Pass-by	0	0	0	0	0	0
	Net Trips	**134**	**37**	**171**	**49**	**124**	**173**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	134	37	171	49	124	173

2041-withoutGO Trip Generation Table

Report for TAZ: 12

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
91,000 sq. ft GFA	Gross Trips	53	12	65	20	49	69
	Mode Split Reduction (28%)	15	3	18	6	14	20
	Net Trips	**38**	**9**	**47**	**14**	**35**	**49**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	38	9	47	14	35	49
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
468,000 sq. ft GFA	Gross Trips	147	44	191	53	136	189
	Mode Split Reduction (28%)	41	12	53	15	38	53
	Net Trips	**106**	**32**	**138**	**38**	**98**	**136**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	106	32	138	38	98	136
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	200	56	256	73	185	258
	Mode Split Reduction	56	15	71	21	52	73
	Pass-by	0	0	0	0	0	0
	Net Trips	**144**	**41**	**185**	**52**	**133**	**185**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	144	41	185	52	133	185
Total Trips	Gross Trips	200	56	256	73	185	258
	Mode Split Reduction	56	15	71	21	52	73
	Pass-by	0	0	0	0	0	0
	Net Trips	**144**	**41**	**185**	**52**	**133**	**185**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	144	41	185	52	133	185

2051-withGO Trip Generation Table

Report for TAZ: 12

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
166,000 sq. ft GFA	Gross Trips	117	26	143	38	92	130
	Mode Split Reduction (33%)	39	9	48	13	30	43
	Net Trips	**78**	**17**	**95**	**25**	**62**	**87**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	78	17	95	25	62	87
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
850,000 sq. ft GFA	Gross Trips	189	56	245	70	180	250
	Mode Split Reduction (33%)	62	18	80	23	59	82
	Net Trips	**127**	**38**	**165**	**47**	**121**	**168**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	127	38	165	47	121	168
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	306	82	388	108	272	380
	Mode Split Reduction	101	27	128	36	89	125
	Pass-by	0	0	0	0	0	0
	Net Trips	**205**	**55**	**260**	**72**	**183**	**255**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	205	55	260	72	183	255
Total Trips	Gross Trips	306	82	388	108	272	380
	Mode Split Reduction	101	27	128	36	89	125
	Pass-by	0	0	0	0	0	0
	Net Trips	**205**	**55**	**260**	**72**	**183**	**255**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	205	55	260	72	183	255

2051-withoutGO Trip Generation Table

Report for TAZ: 12

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
166,000 sq. ft GFA	Gross Trips	117	26	143	38	92	130
	Mode Split Reduction (28%)	33	7	40	11	26	37
	Net Trips	**84**	**19**	**103**	**27**	**66**	**93**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	84	19	103	27	66	93
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
850,000 sq. ft GFA	Gross Trips	189	56	245	70	180	250
	Mode Split Reduction (28%)	53	16	69	20	50	70
	Net Trips	**136**	**40**	**176**	**50**	**130**	**180**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	136	40	176	50	130	180
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	306	82	388	108	272	380
	Mode Split Reduction	86	23	109	31	76	107
	Pass-by	0	0	0	0	0	0
	Net Trips	**220**	**59**	**279**	**77**	**196**	**273**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	220	59	279	77	196	273
Total Trips	Gross Trips	306	82	388	108	272	380
	Mode Split Reduction	86	23	109	31	76	107
	Pass-by	0	0	0	0	0	0
	Net Trips	**220**	**59**	**279**	**77**	**196**	**273**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	220	59	279	77	196	273

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 13

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
739,000 sq. ft GFA	Gross Trips	177	52	229	65	167	232
	Mode Split Reduction (28%)	50	15	65	18	47	65
	Net Trips	**127**	**37**	**164**	**47**	**120**	**167**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	127	37	164	47	120	167
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	177	52	229	65	167	232
	Mode Split Reduction	50	15	65	18	47	65
	Pass-by	0	0	0	0	0	0
	Net Trips	**127**	**37**	**164**	**47**	**120**	**167**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	127	37	164	47	120	167
Total Trips	Gross Trips	177	52	229	65	167	232
	Mode Split Reduction	50	15	65	18	47	65
	Pass-by	0	0	0	0	0	0
	Net Trips	**127**	**37**	**164**	**47**	**120**	**167**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	127	37	164	47	120	167

2041-withGO Trip Generation Table

Report for TAZ: 13

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,356,000 sq. ft GFA	Gross Trips	243	73	316	93	238	331
	Mode Split Reduction (33%)	80	24	104	31	79	110
	Net Trips	**163**	**49**	**212**	**62**	**159**	**221**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	163	49	212	62	159	221
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	243	73	316	93	238	331
	Mode Split Reduction	80	24	104	31	79	110
	Pass-by	0	0	0	0	0	0
	Net Trips	**163**	**49**	**212**	**62**	**159**	**221**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	163	49	212	62	159	221
Total Trips	Gross Trips	243	73	316	93	238	331
	Mode Split Reduction	80	24	104	31	79	110
	Pass-by	0	0	0	0	0	0
	Net Trips	**163**	**49**	**212**	**62**	**159**	**221**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	163	49	212	62	159	221

2041-withoutGO Trip Generation Table

Report for TAZ: 13

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,356,000 sq. ft GFA	Gross Trips	243	73	316	93	239	332
	Mode Split Reduction (28%)	68	20	88	26	67	93
	Net Trips	**175**	**53**	**228**	**67**	**172**	**239**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	175	53	228	67	172	239
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	243	73	316	93	239	332
	Mode Split Reduction	68	20	88	26	67	93
	Pass-by	0	0	0	0	0	0
	Net Trips	**175**	**53**	**228**	**67**	**172**	**239**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	175	53	228	67	172	239
Total Trips	Gross Trips	243	73	316	93	239	332
	Mode Split Reduction	68	20	88	26	67	93
	Pass-by	0	0	0	0	0	0
	Net Trips	**175**	**53**	**228**	**67**	**172**	**239**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	175	53	228	67	172	239

2051-withGO Trip Generation Table

Report for TAZ: 13

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
2,465,000 sq. ft GFA	Gross Trips	363	108	471	142	367	509
	Mode Split Reduction (33%)	120	36	156	47	121	168
	Net Trips	**243**	**72**	**315**	**95**	**246**	**341**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	243	72	315	95	246	341
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	363	108	471	142	367	509
	Mode Split Reduction	120	36	156	47	121	168
	Pass-by	0	0	0	0	0	0
	Net Trips	**243**	**72**	**315**	**95**	**246**	**341**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	243	72	315	95	246	341
Total Trips	Gross Trips	363	108	471	142	367	509
	Mode Split Reduction	120	36	156	47	121	168
	Pass-by	0	0	0	0	0	0
	Net Trips	**243**	**72**	**315**	**95**	**246**	**341**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	243	72	315	95	246	341

2051-withoutGO Trip Generation Table

Report for TAZ: 13

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
2,465,000 sq. ft GFA	Gross Trips	363	108	471	142	366	508
	Mode Split Reduction (28%)	102	30	132	40	102	142
	Net Trips	**261**	**78**	**339**	**102**	**264**	**366**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	261	78	339	102	264	366
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	363	108	471	142	366	508
	Mode Split Reduction	102	30	132	40	102	142
	Pass-by	0	0	0	0	0	0
	Net Trips	**261**	**78**	**339**	**102**	**264**	**366**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	261	78	339	102	264	366
Total Trips	Gross Trips	363	108	471	142	366	508
	Mode Split Reduction	102	30	132	40	102	142
	Pass-by	0	0	0	0	0	0
	Net Trips	**261**	**78**	**339**	**102**	**264**	**366**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	261	78	339	102	264	366

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 14

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
734,000 sq. ft GFA	Gross Trips	176	53	229	65	167	232
	Mode Split Reduction (28%)	49	15	64	18	47	65
	Net Trips	**127**	**38**	**165**	**47**	**120**	**167**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	127	38	165	47	120	167
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	176	53	229	65	167	232
	Mode Split Reduction	49	15	64	18	47	65
	Pass-by	0	0	0	0	0	0
	Net Trips	**127**	**38**	**165**	**47**	**120**	**167**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	127	38	165	47	120	167
Total Trips	Gross Trips	176	53	229	65	167	232
	Mode Split Reduction	49	15	64	18	47	65
	Pass-by	0	0	0	0	0	0
	Net Trips	**127**	**38**	**165**	**47**	**120**	**167**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	127	38	165	47	120	167

2041-withGO Trip Generation Table

Report for TAZ: 14

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,346,000 sq. ft GFA	Gross Trips	242	72	314	92	238	330
	Mode Split Reduction (33%)	80	24	104	30	79	109
	Net Trips	**162**	**48**	**210**	**62**	**159**	**221**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	162	48	210	62	159	221
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	242	72	314	92	238	330
	Mode Split Reduction	80	24	104	30	79	109
	Pass-by	0	0	0	0	0	0
	Net Trips	**162**	**48**	**210**	**62**	**159**	**221**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	162	48	210	62	159	221
Total Trips	Gross Trips	242	72	314	92	238	330
	Mode Split Reduction	80	24	104	30	79	109
	Pass-by	0	0	0	0	0	0
	Net Trips	**162**	**48**	**210**	**62**	**159**	**221**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	162	48	210	62	159	221

2041-withoutGO Trip Generation Table

Report for TAZ: 14

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,346,000 sq. ft GFA	Gross Trips	242	72	314	92	237	329
	Mode Split Reduction (28%)	68	20	88	26	66	92
	Net Trips	**174**	**52**	**226**	**66**	**171**	**237**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	174	52	226	66	171	237
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	242	72	314	92	237	329
	Mode Split Reduction	68	20	88	26	66	92
	Pass-by	0	0	0	0	0	0
	Net Trips	**174**	**52**	**226**	**66**	**171**	**237**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	174	52	226	66	171	237
Total Trips	Gross Trips	242	72	314	92	237	329
	Mode Split Reduction	68	20	88	26	66	92
	Pass-by	0	0	0	0	0	0
	Net Trips	**174**	**52**	**226**	**66**	**171**	**237**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	174	52	226	66	171	237

2051-withGO Trip Generation Table

Report for TAZ: 14

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
2,447,000 sq. ft GFA	Gross Trips	361	107	468	142	364	506
	Mode Split Reduction (33%)	119	35	154	47	120	167
	Net Trips	**242**	**72**	**314**	**95**	**244**	**339**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	242	72	314	95	244	339
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	361	107	468	142	364	506
	Mode Split Reduction	119	35	154	47	120	167
	Pass-by	0	0	0	0	0	0
	Net Trips	**242**	**72**	**314**	**95**	**244**	**339**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	242	72	314	95	244	339
Total Trips	Gross Trips	361	107	468	142	364	506
	Mode Split Reduction	119	35	154	47	120	167
	Pass-by	0	0	0	0	0	0
	Net Trips	**242**	**72**	**314**	**95**	**244**	**339**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	242	72	314	95	244	339

2051-withoutGO Trip Generation Table

Report for TAZ: 14

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
2,447,000 sq. ft GFA	Gross Trips	361	107	468	142	364	506
	Mode Split Reduction (28%)	101	30	131	40	102	142
	Net Trips	**260**	**77**	**337**	**102**	**262**	**364**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	260	77	337	102	262	364
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	361	107	468	142	364	506
	Mode Split Reduction	101	30	131	40	102	142
	Pass-by	0	0	0	0	0	0
	Net Trips	**260**	**77**	**337**	**102**	**262**	**364**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	260	77	337	102	262	364
Total Trips	Gross Trips	361	107	468	142	364	506
	Mode Split Reduction	101	30	131	40	102	142
	Pass-by	0	0	0	0	0	0
	Net Trips	**260**	**77**	**337**	**102**	**262**	**364**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	260	77	337	102	262	364

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 15

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
68,000 sq. ft GFA	Gross Trips	34	7	41	15	36	51
	Mode Split Reduction (28%)	10	2	12	4	10	14
	Net Trips	**24**	**5**	**29**	**11**	**26**	**37**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	24	5	29	11	26	37
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	34	7	41	15	36	51
	Mode Split Reduction	10	2	12	4	10	14
	Pass-by	0	0	0	0	0	0
	Net Trips	**24**	**5**	**29**	**11**	**26**	**37**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	24	5	29	11	26	37
Total Trips	Gross Trips	34	7	41	15	36	51
	Mode Split Reduction	10	2	12	4	10	14
	Pass-by	0	0	0	0	0	0
	Net Trips	**24**	**5**	**29**	**11**	**26**	**37**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	24	5	29	11	26	37

2041-withGO Trip Generation Table

Report for TAZ: 15

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
124,000 sq. ft GFA	Gross Trips	82	17	99	28	68	96
	Mode Split Reduction (33%)	27	6	33	9	22	31
	Net Trips	**55**	**11**	**66**	**19**	**46**	**65**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	55	11	66	19	46	65
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	82	17	99	28	68	96
	Mode Split Reduction	27	6	33	9	22	31
	Pass-by	0	0	0	0	0	0
	Net Trips	**55**	**11**	**66**	**19**	**46**	**65**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	55	11	66	19	46	65
Total Trips	Gross Trips	82	17	99	28	68	96
	Mode Split Reduction	27	6	33	9	22	31
	Pass-by	0	0	0	0	0	0
	Net Trips	**55**	**11**	**66**	**19**	**46**	**65**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	55	11	66	19	46	65

2041-withoutGO Trip Generation Table

Report for TAZ: 15

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
124,000 sq. ft GFA	Gross Trips	82	17	99	28	68	96
	Mode Split Reduction (28%)	23	5	28	8	19	27
	Net Trips	**59**	**12**	**71**	**20**	**49**	**69**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	59	12	71	20	49	69
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	82	17	99	28	68	96
	Mode Split Reduction	23	5	28	8	19	27
	Pass-by	0	0	0	0	0	0
	Net Trips	**59**	**12**	**71**	**20**	**49**	**69**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	59	12	71	20	49	69
Total Trips	Gross Trips	82	17	99	28	68	96
	Mode Split Reduction	23	5	28	8	19	27
	Pass-by	0	0	0	0	0	0
	Net Trips	**59**	**12**	**71**	**20**	**49**	**69**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	59	12	71	20	49	69

2051-withGO Trip Generation Table

Report for TAZ: 15

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
226,000 sq. ft GFA	Gross Trips	168	37	205	52	126	178
	Mode Split Reduction (33%)	55	12	67	17	42	59
	Net Trips	**113**	**25**	**138**	**35**	**84**	**119**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	113	25	138	35	84	119
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	168	37	205	52	126	178
	Mode Split Reduction	55	12	67	17	42	59
	Pass-by	0	0	0	0	0	0
	Net Trips	**113**	**25**	**138**	**35**	**84**	**119**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	113	25	138	35	84	119
Total Trips	Gross Trips	168	37	205	52	126	178
	Mode Split Reduction	55	12	67	17	42	59
	Pass-by	0	0	0	0	0	0
	Net Trips	**113**	**25**	**138**	**35**	**84**	**119**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	113	25	138	35	84	119

2051-withoutGO Trip Generation Table

Report for TAZ: 15

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
226,000 sq. ft GFA	Gross Trips	168	37	205	52	127	179
	Mode Split Reduction (28%)	47	10	57	15	36	51
	Net Trips	**121**	**27**	**148**	**37**	**91**	**128**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	121	27	148	37	91	128
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	168	37	205	52	127	179
	Mode Split Reduction	47	10	57	15	36	51
	Pass-by	0	0	0	0	0	0
	Net Trips	**121**	**27**	**148**	**37**	**91**	**128**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	121	27	148	37	91	128
Total Trips	Gross Trips	168	37	205	52	127	179
	Mode Split Reduction	47	10	57	15	36	51
	Pass-by	0	0	0	0	0	0
	Net Trips	**121**	**27**	**148**	**37**	**91**	**128**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	121	27	148	37	91	128

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 16

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
34,000 sq. ft GFA	Gross Trips	5	1	6	7	16	23
	Mode Split Reduction (28%)	1	0	1	2	4	6
	Net Trips	**4**	**1**	**5**	**5**	**12**	**17**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	4	1	5	5	12	17
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
744,000 sq. ft GFA	Gross Trips	177	53	230	65	168	233
	Mode Split Reduction (28%)	50	15	65	18	47	65
	Net Trips	**127**	**38**	**165**	**47**	**121**	**168**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	127	38	165	47	121	168
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	182	54	236	72	184	256
	Mode Split Reduction	51	15	66	20	51	71
	Pass-by	0	0	0	0	0	0
	Net Trips	**131**	**39**	**170**	**52**	**133**	**185**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	131	39	170	52	133	185
Total Trips	Gross Trips	182	54	236	72	184	256
	Mode Split Reduction	51	15	66	20	51	71
	Pass-by	0	0	0	0	0	0
	Net Trips	**131**	**39**	**170**	**52**	**133**	**185**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	131	39	170	52	133	185

2041-withGO Trip Generation Table

Report for TAZ: 16

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
63,000 sq. ft GFA	Gross Trips	29	7	36	13	33	46
	Mode Split Reduction (33%)	10	2	12	4	11	15
	Net Trips	**19**	**5**	**24**	**9**	**22**	**31**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	19	5	24	9	22	31
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,365,000 sq. ft GFA	Gross Trips	244	73	317	93	240	333
	Mode Split Reduction (33%)	81	24	105	31	79	110
	Net Trips	**163**	**49**	**212**	**62**	**161**	**223**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	163	49	212	62	161	223
Community Centre + Library	Trip Generation Equation or Average Rate	-			-		
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	273	80	353	106	273	379
	Mode Split Reduction	91	26	117	35	90	125
	Pass-by	0	0	0	0	0	0
	Net Trips	**182**	**54**	**236**	**71**	**183**	**254**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	182	54	236	71	183	254
Total Trips	Gross Trips	273	80	353	106	273	379
	Mode Split Reduction	91	26	117	35	90	125
	Pass-by	0	0	0	0	0	0
	Net Trips	**182**	**54**	**236**	**71**	**183**	**254**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	182	54	236	71	183	254

2041-withoutGO Trip Generation Table

Report for TAZ: 16

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
63,000 sq. ft GFA	Gross Trips	29	7	36	13	33	46
	Mode Split Reduction (28%)	8	2	10	4	9	13
	Net Trips	**21**	**5**	**26**	**9**	**24**	**33**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	21	5	26	9	24	33
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,365,000 sq. ft GFA	Gross Trips	244	73	317	93	240	333
	Mode Split Reduction (28%)	68	20	88	26	67	93
	Net Trips	**176**	**53**	**229**	**67**	**173**	**240**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	176	53	229	67	173	240
Community Centre + Library	Trip Generation Equation or Average Rate	-			-		
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	273	80	353	106	273	379
	Mode Split Reduction	76	22	98	30	76	106
	Pass-by	0	0	0	0	0	0
	Net Trips	**197**	**58**	**255**	**76**	**197**	**273**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	197	58	255	76	197	273
Total Trips	Gross Trips	273	80	353	106	273	379
	Mode Split Reduction	76	22	98	30	76	106
	Pass-by	0	0	0	0	0	0
	Net Trips	**197**	**58**	**255**	**76**	**197**	**273**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	197	58	255	76	197	273

2051-withGO Trip Generation Table

Report for TAZ: 16

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
115,000 sq. ft GFA	Gross Trips	74	16	90	26	62	88
	Mode Split Reduction (33%)	24	5	29	9	20	29
	Net Trips	**50**	**11**	**61**	**17**	**42**	**59**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	50	11	61	17	42	59
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
2,481,000 sq. ft GFA	Gross Trips	364	109	473	143	368	511
	Mode Split Reduction (33%)	120	36	156	47	121	168
	Net Trips	**244**	**73**	**317**	**96**	**247**	**343**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	244	73	317	96	247	343
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	438	125	563	169	430	599
	Mode Split Reduction	144	41	185	56	141	197
	Pass-by	0	0	0	0	0	0
	Net Trips	**294**	**84**	**378**	**113**	**289**	**402**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	294	84	378	113	289	402
Total Trips	Gross Trips	438	125	563	169	430	599
	Mode Split Reduction	144	41	185	56	141	197
	Pass-by	0	0	0	0	0	0
	Net Trips	**294**	**84**	**378**	**113**	**289**	**402**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	294	84	378	113	289	402

2051-withoutGO Trip Generation Table

Report for TAZ: 16

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
115,000 sq. ft GFA	Gross Trips	74	16	90	26	63	89
	Mode Split Reduction (28%)	21	4	25	7	18	25
	Net Trips	**53**	**12**	**65**	**19**	**45**	**64**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	53	12	65	19	45	64
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
2,481,000 sq. ft GFA	Gross Trips	364	109	473	143	368	511
	Mode Split Reduction (28%)	102	31	133	40	103	143
	Net Trips	**262**	**78**	**340**	**103**	**265**	**368**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	262	78	340	103	265	368
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	438	125	563	169	431	600
	Mode Split Reduction	123	35	158	47	121	168
	Pass-by	0	0	0	0	0	0
	Net Trips	**315**	**90**	**405**	**122**	**310**	**432**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	315	90	405	122	310	432
Total Trips	Gross Trips	438	125	563	169	431	600
	Mode Split Reduction	123	35	158	47	121	168
	Pass-by	0	0	0	0	0	0
	Net Trips	**315**	**90**	**405**	**122**	**310**	**432**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	315	90	405	122	310	432

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 17

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
100,000 sq. ft GFA	Gross Trips	61	13	74	22	54	76
	Mode Split Reduction (28%)	17	4	21	6	15	21
	Net Trips	**44**	**9**	**53**	**16**	**39**	**55**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	44	9	53	16	39	55
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
990,000 sq. ft GFA	Gross Trips	204	60	264	76	196	272
	Mode Split Reduction (28%)	57	17	74	21	55	76
	Net Trips	**147**	**43**	**190**	**55**	**141**	**196**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	147	43	190	55	141	196
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	265	73	338	98	250	348
	Mode Split Reduction	74	21	95	27	70	97
	Pass-by	0	0	0	0	0	0
	Net Trips	**191**	**52**	**243**	**71**	**180**	**251**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	191	52	243	71	180	251
Total Trips	Gross Trips	265	73	338	98	250	348
	Mode Split Reduction	74	21	95	27	70	97
	Pass-by	0	0	0	0	0	0
	Net Trips	**191**	**52**	**243**	**71**	**180**	**251**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	191	52	243	71	180	251

2041-withGO Trip Generation Table

Report for TAZ: 17

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
184,000 sq. ft GFA	Gross Trips	133	29	162	42	102	144
	Mode Split Reduction (33%)	44	10	54	14	34	48
	Net Trips	**89**	**19**	**108**	**28**	**68**	**96**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	89	19	108	28	68	96
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,815,000 sq. ft GFA	Gross Trips	293	87	380	113	292	405
	Mode Split Reduction (33%)	97	29	126	37	96	133
	Net Trips	**196**	**58**	**254**	**76**	**196**	**272**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	196	58	254	76	196	272
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	426	116	542	155	394	549
	Mode Split Reduction	141	39	180	51	130	181
	Pass-by	0	0	0	0	0	0
	Net Trips	**285**	**77**	**362**	**104**	**264**	**368**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	285	77	362	104	264	368
Total Trips	Gross Trips	426	116	542	155	394	549
	Mode Split Reduction	141	39	180	51	130	181
	Pass-by	0	0	0	0	0	0
	Net Trips	**285**	**77**	**362**	**104**	**264**	**368**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	285	77	362	104	264	368

2041-withoutGO Trip Generation Table

Report for TAZ: 17

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
184,000 sq. ft GFA	Gross Trips	133	29	162	42	102	144
	Mode Split Reduction (28%)	37	8	45	12	29	41
	Net Trips	**96**	**21**	**117**	**30**	**73**	**103**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	96	21	117	30	73	103
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
1,815,000 sq. ft GFA	Gross Trips	293	87	380	113	291	404
	Mode Split Reduction (28%)	82	24	106	32	81	113
	Net Trips	**211**	**63**	**274**	**81**	**210**	**291**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	211	63	274	81	210	291
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	426	116	542	155	393	548
	Mode Split Reduction	119	32	151	44	110	154
	Pass-by	0	0	0	0	0	0
	Net Trips	**307**	**84**	**391**	**111**	**283**	**394**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	307	84	391	111	283	394
Total Trips	Gross Trips	426	116	542	155	393	548
	Mode Split Reduction	119	32	151	44	110	154
	Pass-by	0	0	0	0	0	0
	Net Trips	**307**	**84**	**391**	**111**	**283**	**394**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	307	84	391	111	283	394

2051-withGO Trip Generation Table

Report for TAZ: 17

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
335,000 sq. ft GFA	Gross Trips	261	58	319	77	190	267
	Mode Split Reduction (33%)	86	19	105	25	63	88
	Net Trips	**175**	**39**	**214**	**52**	**127**	**179**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	175	39	214	52	127	179
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
3,299,000 sq. ft GFA	Gross Trips	453	135	588	180	462	642
	Mode Split Reduction (33%)	149	45	194	59	152	211
	Net Trips	**304**	**90**	**394**	**121**	**310**	**431**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	304	90	394	121	310	431
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	714	193	907	257	652	909
	Mode Split Reduction	235	64	299	84	215	299
	Pass-by	0	0	0	0	0	0
	Net Trips	**479**	**129**	**608**	**173**	**437**	**610**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	479	129	608	173	437	610
Total Trips	Gross Trips	714	193	907	257	652	909
	Mode Split Reduction	235	64	299	84	215	299
	Pass-by	0	0	0	0	0	0
	Net Trips	**479**	**129**	**608**	**173**	**437**	**610**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	479	129	608	173	437	610

2051-withoutGO Trip Generation Table

Report for TAZ: 17

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
335,000 sq. ft GFA	Gross Trips	261	58	319	77	189	266
	Mode Split Reduction (28%)	73	16	89	22	53	75
	Net Trips	**188**	**42**	**230**	**55**	**136**	**191**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	188	42	230	55	136	191
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
3,299,000 sq. ft GFA	Gross Trips	453	135	588	180	462	642
	Mode Split Reduction (28%)	127	38	165	50	129	179
	Net Trips	**326**	**97**	**423**	**130**	**333**	**463**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	326	97	423	130	333	463
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	714	193	907	257	651	908
	Mode Split Reduction	200	54	254	72	182	254
	Pass-by	0	0	0	0	0	0
	Net Trips	**514**	**139**	**653**	**185**	**469**	**654**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	514	139	653	185	469	654
Total Trips	Gross Trips	714	193	907	257	651	908
	Mode Split Reduction	200	54	254	72	182	254
	Pass-by	0	0	0	0	0	0
	Net Trips	**514**	**139**	**653**	**185**	**469**	**654**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	514	139	653	185	469	654

With GO scenario not applicable for 2031 since GO station not in place.

2031-withoutGO Trip Generation Table

Report for TAZ: 18

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
2,724,000 sq. ft GFA	Gross Trips	391	116	507	154	396	550
	Mode Split Reduction (28%)	109	32	141	43	111	154
	Net Trips	**282**	**84**	**366**	**111**	**285**	**396**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	282	84	366	111	285	396
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	391	116	507	154	396	550
	Mode Split Reduction	109	32	141	43	111	154
	Pass-by	0	0	0	0	0	0
	Net Trips	**282**	**84**	**366**	**111**	**285**	**396**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	282	84	366	111	285	396
Total Trips	Gross Trips	391	116	507	154	396	550
	Mode Split Reduction	109	32	141	43	111	154
	Pass-by	0	0	0	0	0	0
	Net Trips	**282**	**84**	**366**	**111**	**285**	**396**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	282	84	366	111	285	396

2041-withGO Trip Generation Table

Report for TAZ: 18

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
4,995,000 sq. ft GFA	Gross Trips	635	190	825	256	657	913
	Mode Split Reduction (33%)	210	63	273	84	217	301
	Net Trips	**425**	**127**	**552**	**172**	**440**	**612**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	425	127	552	172	440	612
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	635	190	825	256	657	913
	Mode Split Reduction	210	63	273	84	217	301
	Pass-by	0	0	0	0	0	0
	Net Trips	**425**	**127**	**552**	**172**	**440**	**612**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	425	127	552	172	440	612
Total Trips	Gross Trips	635	190	825	256	657	913
	Mode Split Reduction	210	63	273	84	217	301
	Pass-by	0	0	0	0	0	0
	Net Trips	**425**	**127**	**552**	**172**	**440**	**612**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	425	127	552	172	440	612

2041-withoutGO Trip Generation Table

Report for TAZ: 18

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
4,995,000 sq. ft GFA	Gross Trips	635	190	825	256	658	914
	Mode Split Reduction (28%)	178	53	231	72	184	256
	Net Trips	**457**	**137**	**594**	**184**	**474**	**658**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	457	137	594	184	474	658
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	635	190	825	256	658	914
	Mode Split Reduction	178	53	231	72	184	256
	Pass-by	0	0	0	0	0	0
	Net Trips	**457**	**137**	**594**	**184**	**474**	**658**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	457	137	594	184	474	658
Total Trips	Gross Trips	635	190	825	256	658	914
	Mode Split Reduction	178	53	231	72	184	256
	Pass-by	0	0	0	0	0	0
	Net Trips	**457**	**137**	**594**	**184**	**474**	**658**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	457	137	594	184	474	658

2051-withGO Trip Generation Table

Report for TAZ: 18

Mode Split Reduction: 33%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.87 Ln(X) - 0.44			Ln(T) = 0.88 Ln(X) - 0.57		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	0.25			T = 0.24 (X) + 2		
ITE LUC 221	Directional Split	15%	85%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	Ln(T) = 0.93 Ln(X) - 1.17			Ln(T) = 0.87 Ln(X) - 0.96		
ITE LUC 222	Directional Split	11%	89%	-	69%	31%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
9,082,000 sq. ft GFA	Gross Trips	1076	321	1397	439	1128	1567
	Mode Split Reduction (33%)	355	106	461	145	372	517
	Net Trips	**721**	**215**	**936**	**294**	**756**	**1050**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	721	215	936	294	756	1050
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0.00 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (33%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	1076	321	1397	439	1128	1567
	Mode Split Reduction	355	106	461	145	372	517
	Pass-by	0	0	0	0	0	0
	Net Trips	**721**	**215**	**936**	**294**	**756**	**1050**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	721	215	936	294	756	1050
Total Trips	Gross Trips	1076	321	1397	439	1128	1567
	Mode Split Reduction	355	106	461	145	372	517
	Pass-by	0	0	0	0	0	0
	Net Trips	**721**	**215**	**936**	**294**	**756**	**1050**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	721	215	936	294	756	1050

2051-withoutGO Trip Generation Table

Report for TAZ: 18

Mode Split Reduction: 28%

Land Use	Parameter	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Multifamily Housing (Low-Rise)	Trip Generation Equation or Average Rate	T = 0.24 (X) + 9.56			T = 0.24 (X) + 3.25		
ITE LUC 220	Directional Split	10%	90%	-	90%	10%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (Mid-Rise)	Trip Generation Equation or Average Rate	T = 0.25 (X) + 5.35			0.26		
ITE LUC 221	Directional Split	14%	86%	-	74%	26%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
Multifamily Housing (High-Rise)	Trip Generation Equation or Average Rate	0.24			Ln(T) = 0.95 Ln(X) - 1.36		
ITE LUC 222	Directional Split	25%	75%	-	73%	27%	-
0 Units	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Gross Trips	0	0	0	0	0	0
Total Residential	Mode Split Reduction (0%)	0	0	0	0	0	0
0 Units	**Net Trips**	**0**	**0**	**0**	**0**	**0**	**0**
Shopping Center	Trip Generation Equation or Average Rate	0.88			Ln(T) = 0.66 Ln(X) + 3.23		
ITE LUC 820	Directional Split	62%	38%	-	49%	51%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Pass-by (34% PM)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (90% Internal)	0	0	0	0	0	0
	Net Trips (10% External)	0	0	0	0	0	0
Office	Trip Generation Equation or Average Rate	T = 0.72 (X) + 25.14			T = 0.83 (X) + 7.46		
ITE LUC 710	Directional Split	87%	13%	-	16%	84%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (0%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Business Park	Trip Generation Equation or Average Rate	T = 1.04 (X) - 29.56			T = 0.81 (X) - 4.84		
ITE LUC 770	Directional Split	82%	18%	-	29%	71%	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Industrial Park	Trip Generation Equation or Average Rate	T = 0.14 (X) + 125.84			T = 0.16 (X) + 114.29		
ITE LUC 130	Directional Split	77%	23%	-	28%	72%	-
9,082,000 sq. ft GFA	Gross Trips	1076	321	1397	439	1129	1568
	Mode Split Reduction (28%)	301	90	391	123	316	439
	Net Trips	**775**	**231**	**1006**	**316**	**813**	**1129**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	775	231	1006	316	813	1129
Community Centre + Library	Trip Generation Equation or Average Rate		-			-	
ITE LUC CUSTOM (495 + 590)	Directional Split	-	-	-	-	-	-
0 sq. ft GFA	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (20% Internal)	0	0	0	0	0	0
	Net Trips (80% External)	0	0	0	0	0	0
Public Park - District Park	Trip Generation Equation or Average Rate	0.05			0.15		
ITE LUC 411	Directional Split	62%	38%	-	57%	43%	-
0 acres	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (0% Internal)	0	0	0	0	0	0
	Net Trips (100% External)	0	0	0	0	0	0
Elementary School	Trip Generation Equation or Average Rate	0.73			0.16		
ITE LUC 520	Directional Split	54%	46%	-	46%	54%	-
0 Students	Gross Trips	0	0	0	0	0	0
	Mode Split Reduction (28%)	0	0	0	0	0	0
	Net Trips	**0**	**0**	**0**	**0**	**0**	**0**
	Net Trips (85% Internal)	0	0	0	0	0	0
	Net Trips (15% External)	0	0	0	0	0	0
Total Non-Residential	Gross Trips	1076	321	1397	439	1129	1568
	Mode Split Reduction	301	90	391	123	316	439
	Pass-by	0	0	0	0	0	0
	Net Trips	**775**	**231**	**1006**	**316**	**813**	**1129**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	775	231	1006	316	813	1129
Total Trips	Gross Trips	1076	321	1397	439	1129	1568
	Mode Split Reduction	301	90	391	123	316	439
	Pass-by	0	0	0	0	0	0
	Net Trips	**775**	**231**	**1006**	**316**	**813**	**1129**
	Net Trips (Internal)	0	0	0	0	0	0
	Net Trips (External)	775	231	1006	316	813	1129

Appendix G Excerpt of 2022 TMP and Trip Distribution Calculations

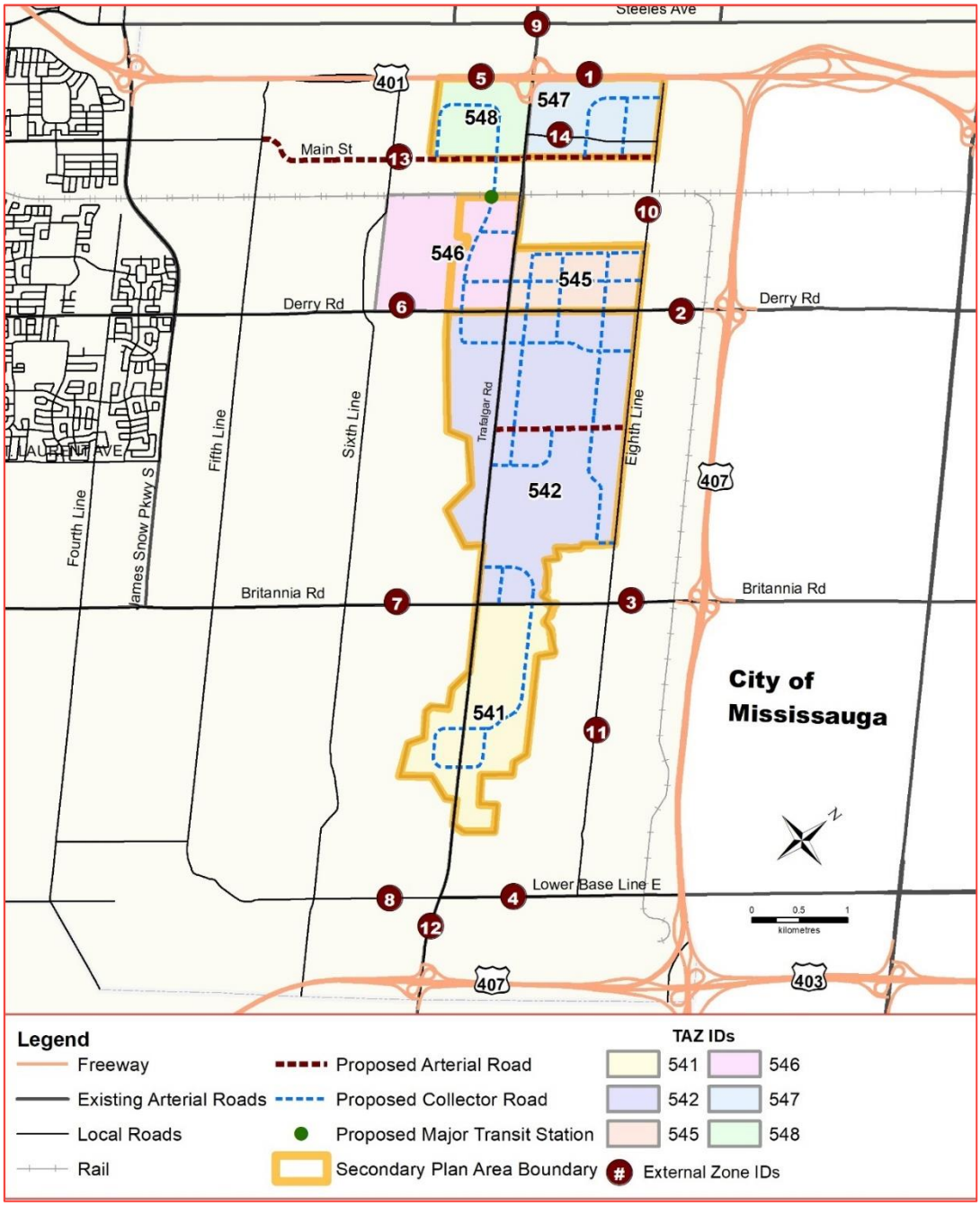
APPENDIX

F TRIP ASSIGNMENT OF FUTURE TOTAL TRAFFIC

APPENDIX

To conduct the trip distribution and trip assignment of future total traffic on the proposed roadway network in the Trafalgar Corridor, a trip assignment model was used that distributes the traffic on the roadway network based on travel times and shortest distances. The input of the trips to the model is done using origin and destination matrices. **Figure F-1** shows the zones identified in the study area along with the future roadway network in the Trafalgar Corridor Development area. The figure shows the external gates (gate IDs 1 through 14) that act as the gateways to the region-wide trip distribution. Gate ID #14 is coded to account for the background trips that are attributed to the current development existing in this area. Zones 541, 542, 545, 546, 547 and 548 are the zones within the Trafalgar Corridor Development area. These zones facilitate the distribution of external and internal traffic.

Figure F-1: Future Roadway Network and Origin and Destination Zones



APPENDIX

Table F-1 below shows the trips by type and scenario for the a.m. and p.m. peak period which are estimated using the trip generation data discussed in section 4.1 in the report. The trips shown in this table are then distributed between the origins and destination according to the trip distribution discussed in section 4.2.

Table F-1: Trips by Type by Zone

Zone	AM Peak Trips								PM Peak Trips							
	External Trips		Interzonal Trips		Intrazonal Trips		Total Trips		External Trips		Interzonal Trips		Intrazonal Trips		Total Trips	
	E-I	I-E	IN	OUT	IN	OUT	IN	OUT	E-I	I-E	IN	OUT	IN	OUT	IN	OUT
Scenario A																
541	333	663	74	121	19	19	426	803	639	533	154	107	22	22	815	661
542	634	1,364	126	256	74	74	834	1,694	1,263	1,085	329	190	92	92	1,684	1,366
545	278	239	67	56	5	5	350	300	223	408	83	89	5	5	311	502
546	610	441	169	82	24	24	803	547	545	1,219	133	227	36	36	714	1,481
547	283	56	68	15	2	2	353	72	94	425	33	90	2	2	129	518
548	180	33	34	11	1	1	215	44	46	219	20	47	1	1	67	267
Total	2,319	2,796	538	540	124	124	2,980	3,460	2,810	3,889	752	750	158	158	3,720	4,796
Scenario B																
541	344	710	62	73	20	20	426	803	698	553	94	85	23	23	815	661
542	678	1,508	70	100	86	86	834	1,694	1,443	1,167	137	95	104	104	1,684	1,366
545	115	22	13	4	1	1	129	26	27	119	7	19	1	1	35	139
546	116	23	13	3	0	0	129	26	30	120	5	19	0	0	35	139
547	115	23	14	4	0	0	129	26	30	119	5	19	0	0	35	139
548	115	22	13	4	1	1	129	26	29	119	5	19	1	1	35	139
Total	1,485	2,308	185	187	107	107	1,777	2,602	2,256	2,197	253	256	129	129	2,638	2,582

Note:
E-I - External Origin & Destination within Trafalgar Corridor Development Area
I-E - Origin within Trafalgar Corridor Development Area & External Destination

Tables F-2 thru **F-5** shows the development trip distribution matrices between various zones for both the scenarios A and B and the two peak periods. In the matrices, the grey colour highlighted cells refer to background trips, the green colour highlighted cells are the external to internal (E-I) trips, the yellow colour highlighted cells are internal to external trips, the orange colour highlighted cells are the interzonal trips and the blue colour highlighted cells are the intrazonal trips.

The future background traffic volumes estimated in section 3 of the report and shown in Figures 3-3 and 3-4 for scenarios A and B were used to estimate the trips between the external zones using Origin-Destination Matrix Estimation tool. Tables F-6 thru F-9 show the trip distribution matrices between the external zones. It should be noted that there are volume imbalances between the intersections in the estimated background traffic volumes indicating that there are trips that are attracted and generated from the existing developments. Therefore, we also see trips to/from various internal zones in these matrices.

Finally, a trip assignment model that assigns the trips based on travel times and shortest distance is used to assign the total trips. The total trips are obtained by summing up the respective development trips (Tables F-2 through F-5) and the background trips (Tables F-6 through F-9). Figures F-2 through F-5 show the trip assignment of the total traffic volumes for scenarios A and B for both the peak periods. Note that in the trip assignment figures, all the volumes are not visible due to the limitations of the display with the scale of the map. The turning movement volumes were extracted from these trip assignment models for the study and additional intersections. The turning movement volumes and capacity analysis for the study and additional intersections are discussed in Section 5.

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Table F-2: AM Scenario A - Development Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1															17	51	26	57	33	21
2															14	35	17	38	12	8
3															18	20	7	14	6	4
4															19	20	6	13	5	4
5															31	87	40	87	67	43
6															24	45	40	87	28	18
7															45	120	33	72	20	13
8															6	2	0	0	5	3
9															37	57	25	55	43	28
10															0	0	0	0	0	0
11															0	11	5	11	5	3
12															110	156	68	148	29	18
13															17	36	16	34	36	23
14																				
541	34	21	33	39	74	56	79	14	113	0	0	165	40		19	54	12	36	13	6
542	111	61	38	45	221	114	206	4	201	0	28	253	90		53	74	39	107	37	19
545	23	13	5	6	40	32	25	0	36	0	5	44	16		6	21	6	19	6	3
546	41	23	9	11	74	58	46	0	65	0	10	81	29		12	41	13	24	11	5
547	6	3	2	2	15	4	3	1	13	0	2	5	7		2	6	2	4	2	1
548	4	2	1	1	9	3	2	1	8	0	1	3	4		1	4	1	3	1	1

Table F-3: PM Scenario A - Development Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1															33	102	21	51	10	5
2															20	56	12	28	4	2
3															32	35	5	10	2	1
4															37	41	6	13	2	1
5															72	204	38	91	25	12
6															54	106	30	72	7	4
7															76	190	23	56	5	3
8															14	4	0	0	2	1
9															109	186	33	80	21	11
10															0	0	0	0	0	0
11															0	26	5	12	2	1
12															159	234	41	100	9	4
13															39	83	15	36	11	6
14																				
541	26	22	29	31	50	38	71	10	59	0	0	175	27		23	72	9	20	4	2
542	87	59	34	34	148	77	204	3	98	0	19	266	61		70	92	32	67	14	8
545	38	25	9	9	58	58	48	0	37	0	7	99	23		15	49	6	20	4	2
546	114	74	27	24	173	174	143	0	110	0	21	295	68		45	138	28	36	9	6
547	49	18	9	8	100	42	30	8	65	0	7	43	53		16	46	9	17	3	2
548	25	10	5	4	52	22	16	4	33	0	4	22	28		8	24	5	9	2	1

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Table F-4: AM Scenario B - Development Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1															17	53	11	11	13	13
2															14	36	7	7	5	5
3															18	20	3	3	3	3
4															19	21	3	3	3	3
5															36	100	18	18	29	29
6															26	51	17	17	11	11
7															45	126	14	14	8	8
8															7	2	0	0	2	2
9															39	62	11	11	18	18
10															0	0	0	0	0	0
11															0	12	2	2	2	2
12															110	161	28	28	12	12
13															19	40	7	7	15	15
14																				
541	36	22	35	41	80	60	85	15	123	0	0	175	43		20	59	3	3	3	3
542	123	67	42	49	245	127	227	5	224	0	30	276	99		58	86	10	10	10	10
545	3	2	1	1	4	3	3	0	4	0	1	4	2		1	3	1	0	0	0
546	3	2	1	1	4	4	3	0	4	0	1	5	2		1	2	0	0	1	0
547	3	1	1	1	6	2	2	1	6	0	1	2	3		1	3	0	0	0	0
548	3	1	1	1	6	2	1	1	5	0	1	2	3		1	3	0	0	0	1

Table F-5: PM Scenario B - Development Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1															36	118	3	3	3	3
2															22	64	2	2	2	2
3															35	40	1	1	1	1
4															40	46	1	1	1	1
5															79	234	5	5	8	8
6															59	121	4	4	3	3
7															84	217	3	4	2	2
8															15	4	0	0	1	1
9															121	215	4	5	7	7
10															0	0	0	0	0	0
11															0	29	1	1	1	1
12															172	264	5	6	3	3
13															42	95	2	2	4	4
14																				
541	27	22	28	31	57	42	73	11	62	0	0	176	30		24	81	2	1	1	1
542	90	61	35	36	171	88	217	3	106	0	20	277	69		78	105	5	3	4	4
545	12	8	3	3	17	17	14	0	11	0	3	29	7		4	14	1	0	0	0
546	12	8	3	3	17	18	14	0	11	0	3	29	7		4	14	0	0	0	0
547	14	5	3	3	28	12	9	2	18	0	2	12	15		4	14	0	1	0	0
548	14	5	3	3	28	12	9	2	18	0	2	12	15		4	14	0	0	0	1

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Table F-6: AM Scenario A - Background Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1	0	9	1	9	0	13	3	1	530	0	0	67	7	58	7	13	0	100	4	0
2	10	0	5	7	89	498	16	1	28	3	31	53	4	1	2	110	140	0	3	0
3	1	3	0	16	6	7	265	2	2	0	13	118	0	0	6	47	1	0	0	0
4	2	8	21	0	21	5	9	88	7	0	0	125	1	0	1	9	5	0	1	0
5	44	25	3	26	0	36	8	3	126	0	1	183	18	158	19	36	0	273	11	0
6	39	1858	29	49	364	0	16	6	112	2	6	354	17	4	37	358	92	0	12	0
7	2	37	800	43	14	3	0	5	4	0	4	310	1	0	18	12	3	0	0	0
8	2	8	21	449	22	5	10	0	7	0	0	133	1	0	1	9	5	0	1	0
9	1761	39	5	40	0	56	13	5	0	0	1	286	28	247	30	57	0	0	17	0
10	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	17	30	0	2	2	3	0	1	0	0	1	0	0	0	0	3	0	0	0
12	33	110	297	191	306	70	132	28	94	0	1	0	14	4	12	129	74	0	10	0
13	6	9	1	9	59	12	3	1	18	0	0	63	0	1	7	12	0	93	82	0
14	1	0	0	0	13	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
541	7	27	105	0	67	16	35	0	20	0	0	3	3	0	0	0	0	0	0	0
542	4	14	23	5	37	10	67	1	12	0	0	36	2	0	0	0	0	0	0	0
545	1	8	0	1	7	2	0	0	2	0	0	4	0	0	0	0	0	0	0	0
546	0	1	0	1	0	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
547	4	4	0	4	37	6	1	0	11	0	0	29	305	0	0	0	0	0	0	0
548	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table F-7: PM Scenario A - Background Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1	0	14	1	10	0	41	2	6	583	0	1	58	42	46	4	8	0	1	7	0
2	14	0	0	20	13	1957	49	12	55	6	32	121	17	1	3	168	275	0	3	0
3	1	0	0	26	1	24	862	16	4	0	11	157	1	0	14	21	1	0	0	0
4	12	12	17	0	11	31	35	534	46	0	0	190	15	1	0	3	8	0	3	0
5	69	36	2	26	0	110	5	16	261	0	3	157	113	122	10	19	1	4	18	0
6	19	755	5	23	17	0	5	14	71	0	15	135	22	1	9	24	12	0	5	0
7	3	28	416	31	3	7	0	19	11	0	2	185	3	0	4	1	2	0	1	0
8	0	0	1	90	0	1	1	0	2	0	0	20	1	0	0	0	0	0	0	0
9	273	52	2	38	1	158	8	23	0	0	6	225	162	176	14	28	1	0	25	0
10	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	1	23	16	0	1	18	5	0	3	1	0	1	1	0	0	2	8	0	0	0
12	99	100	133	176	88	253	280	243	372	0	1	0	117	5	1	29	60	0	24	0
13	11	21	1	15	10	62	3	9	40	0	2	90	0	1	6	10	0	2	94	0
14	47	1	0	0	43	2	0	0	180	0	0	2	2	0	0	0	0	0	0	0
541	15	15	30	18	13	37	42	11	55	0	0	105	17	0	0	0	0	0	0	0
542	28	27	68	2	25	74	63	1	108	0	0	12	35	0	0	0	0	0	0	0
545	6	35	0	4	6	36	1	3	26	0	0	29	8	0	0	0	0	0	0	0
546	0	5	0	4	0	15	1	2	1	0	0	21	0	0	0	0	0	0	0	0
547	4	2	0	2	4	7	0	1	15	0	0	10	366	0	0	0	0	0	0	0
548	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Table F-8: AM Scenario B - Background Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1	0	11	1	16	0	14	3	1	585	0	0	70	12	37	8	10	0	132	6	0
2	11	0	5	10	87	507	15	1	28	3	29	46	5	0	2	112	147	0	3	0
3	1	3	0	27	6	7	271	2	2	0	13	118	0	0	5	39	1	0	0	0
4	2	9	20	0	20	5	9	88	7	0	0	129	1	0	1	6	6	0	1	0
5	49	30	3	43	0	37	9	3	127	0	1	180	30	96	20	26	0	339	17	0
6	43	2201	26	81	354	0	17	6	112	2	6	344	20	1	39	53	106	0	11	0
7	2	40	812	71	14	3	0	5	4	0	5	301	1	0	15	5	4	0	0	0
8	2	9	22	422	23	5	10	0	7	0	0	143	1	0	1	6	6	0	1	0
9	1810	49	5	70	0	61	15	5	0	0	1	297	49	158	34	45	0	0	27	0
10	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	17	30	0	2	2	3	0	1	0	0	1	0	0	0	0	3	0	0	0
12	38	123	302	180	309	73	135	30	97	0	1	0	17	1	7	91	101	0	9	0
13	5	7	1	10	39	8	2	1	12	0	0	42	0	0	5	6	0	78	29	0
14	5	0	0	0	53	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0
541	8	25	99	0	66	17	32	0	21	0	0	2	4	0	0	0	0	0	0	0
542	4	41	33	7	33	8	68	1	10	0	0	31	2	0	0	0	0	0	0	0
545	1	5	0	0	6	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0
546	0	4	0	5	0	3	0	0	0	0	0	15	0	0	0	0	0	0	0	0
547	2	0	0	1	18	1	0	0	6	0	0	2	122	0	0	0	0	0	0	0
548	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table F-9: AM Scenario B - Background Trip Distribution

From Zone	To Zone																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	541	542	545	546	547	548
1	0	17	1	12	0	51	2	7	643	0	1	73	55	25	4	5	0	1	11	0
2	15	0	0	21	13	2014	47	12	59	6	30	125	18	0	2	173	287	0	3	0
3	1	0	0	28	1	26	849	17	4	0	12	167	1	0	11	40	2	0	0	0
4	12	12	17	0	10	29	35	535	45	0	0	194	14	0	0	3	11	0	3	0
5	71	41	2	30	0	126	6	18	267	0	4	183	137	61	9	10	1	5	26	0
6	20	774	4	24	16	0	5	14	74	0	16	140	22	0	8	10	16	0	5	0
7	3	27	414	33	3	6	0	20	10	0	0	199	3	0	4	1	3	0	1	0
8	0	0	1	91	0	1	1	0	2	0	0	20	1	0	0	0	0	0	0	0
9	298	58	2	43	1	175	9	25	0	0	8	254	190	85	12	14	1	0	35	0
10	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	1	22	16	0	1	17	5	0	3	1	0	1	1	0	0	2	9	0	0	0
12	99	99	132	183	78	242	281	250	367	0	0	0	112	2	1	39	84	0	22	0
13	10	20	1	14	8	59	3	9	36	0	2	87	0	0	5	5	0	2	46	0
14	55	0	0	0	45	1	0	0	210	0	0	1	1	0	0	0	0	0	0	0
541	23	21	40	1	18	54	64	1	83	0	0	6	25	0	0	0	0	0	0	0
542	26	29	73	3	21	65	85	1	100	0	0	18	30	0	0	0	0	0	0	0
545	1	23	0	3	1	9	1	2	4	0	0	22	1	0	0	0	0	0	0	0
546	0	1	0	1	0	3	0	0	0	0	0	4	0	0	0	0	0	0	0	0
547	1	1	0	1	1	5	0	1	5	0	0	7	115	0	0	0	0	0	0	0
548	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Tables F-2 and F-3 of the WSP 2022 Agerton and Trafalgar TMP Addendum were used as a base to calculate the "with GO Station" site trip distribution

Tables F-4 and F-5 of the WSP 2022 Agerton and Trafalgar TMP Addendum were used as a base to calculate the "without GO Station" site trip distribution

The "with GO" site trip distribution calculations have been provided for the purposes of illustrating TYLin's trip distribution methodology.

Tables F-2 through F-5 are O-D matrices that provide a summary of the Development trips internal and external to the Agerton and Trafalgar Secondary Plan areas. Development trips bound to/from external zones (1 through 14) to the Secondary Plan2 (Zones 541, 542, 545-548) were used to calcualte the distribution of site trips to/from study area gateways.

Based on Figure F-1 of Appendix F, the 14 external zones/study gateways are listed in Table 1 below. Table 1 summarizes the distribution of the total trips bound in and out of the study area during each peak hour, as calculated from the O-D matrices.

Table 1 - External Develpoment Trip Distribution with GO by Zone (1-14)

Zone		AM		PM	
		IN	OUT	IN	OUT
1	**Hwy 401 E**	8.7%	7.7%	7.7%	8.7%
2	**Derry Rd E**	5.3%	4.3%	4.2%	5.3%
3	**Britannia Rd E**	2.9%	3.1%	3.0%	2.9%
4	**LBL E**	2.8%	3.7%	3.5%	2.8%
5	**Hwy 401 W**	15.1%	15.3%	15.4%	14.8%
6	**Derry Rd W**	10.3%	9.4%	9.5%	10.5%
7	**Britannia Rd W**	12.9%	12.7%	12.3%	13.1%
8	**LBL W**	0.7%	0.7%	0.7%	0.6%
9	**Trafalgar Rd N**	10.4%	15.4%	15.3%	10.3%
10	**Eighth Line N**	0.0%	0.0%	0.0%	0.0%
11	**Eighth Line S**	1.5%	1.6%	1.6%	1.5%
12	**Trafalgar Rd S**	22.5%	19.4%	19.5%	23.0%
13	**Main St W**	6.9%	6.6%	7.2%	6.6%
14	**Auburn W**	0.0%	0.0%	0.0%	0.0%
	TOTAL	100%	100%	100%	100%

Table 2 takes the values calculated in Table 1 and applies them to the study road network boundaries/gateways for the purposes of TYLin's site traffic assignment. Of note, Zones 4 and 11 were added together and applied to the "Lower Base Line to/from the east" gateway given that Eighth Line S is a dead end, as per existing conditions.

Table 2 - Trip Distribution: With GO Station by Gateway (2031 and 2041 horizon years)

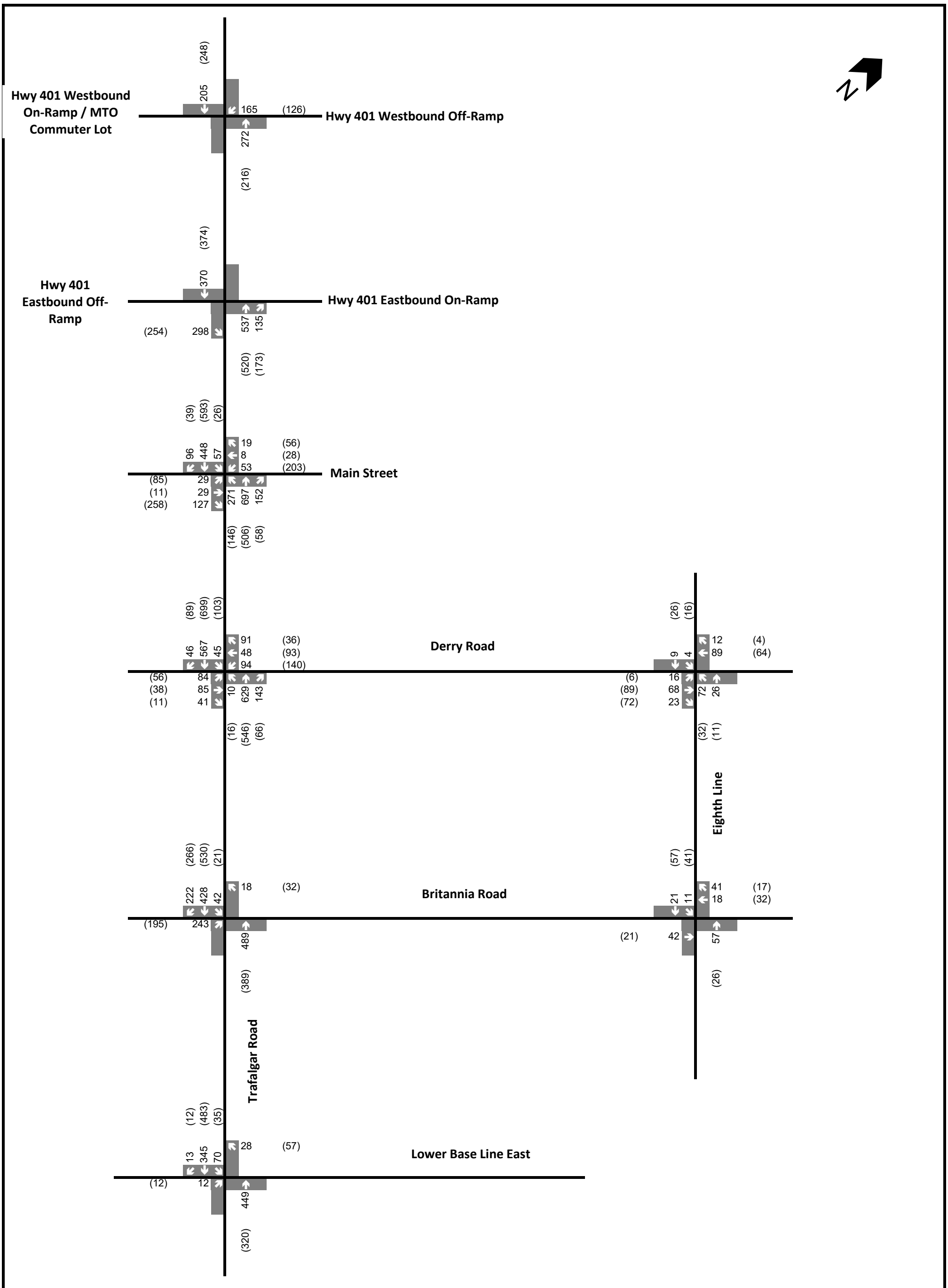
Location/Gateway	AM		PM	
	IN	OUT	IN	OUT
Trafalgar Road to/from north	10.4%	15.4%	15.3%	10.3%
Eighth Line to/from north	0.0%	0.0%	0.0%	0.0%
Derry Road to/from east	5.3%	4.3%	4.2%	5.3%
Britannia Road to/from east	2.9%	3.1%	3.0%	2.9%
Lower Baseline to/from east	4.3%	5.3%	5.1%	4.3%
Trafalgar Road to/from south	22.5%	19.4%	19.5%	23.0%
Lower Baseline to/from west	0.7%	0.7%	0.7%	0.6%
Britannia Road to/from west	12.9%	12.7%	12.3%	13.1%
Derry Road to/from west	10.3%	9.4%	9.5%	10.5%
Highway 401 to/from east	8.7%	7.7%	7.7%	8.7%
Highway 401 to/from west	15.1%	15.3%	15.4%	14.8%
Main Street to/from west	6.9%	6.6%	7.2%	6.6%
Louis St. Laurent to/from west	0.0%	0.0%	0.0%	0.0%
TOTAL	100.00%	100.00%	100.00%	100.00%

By 2051, it is expected that the planned easterly extension of Louis St. Laurent Avenue to Trafalgar Road will be complete, provided a new east-west route into the southwest area of Milton. This extension was not accounted for in the develpoment traffic O-D matrices. To account for the impact of the new connection on site traffic travel patterns, it was assumed that a portion of westbound traffic on Derry Road and Britannia Road would shift to Louis St. Laurent Avenue in 2051.
It was assumed that 20% of the site traffic bound to/from the west via Derry Road and Britannia Road would shift to Louis St. Laurent. Traffic was shifted from each road proportional to the amount of traffic that was distributed for the 2031 and 2041 scenario. For example, the total AM IN distribution for Derry Road and Britannia Road to/from the west is 23.2% in Table 3. 20% of this value is 4.64%, assigned to Louis St. Laurent Ave., as shown in Table 3. The proportional redistribution of the traffic can be seen in Britannia Road's distribution being lowered by 2.6%, while Derry Road's was lowered by the remaining 2.04% (As Britannia Road has a higher percentage of inbound traffic assigned to it during the AM peak hour).

Table 3 - Trip Distribution: With GO Station by Gateway (2051 horizon year)

Location/Gateway	AM		PM	
	IN	OUT	IN	OUT
Trafalgar Road to/from north	10.4%	15.4%	15.3%	10.3%
Eighth Line to/from north	0.0%	0.0%	0.0%	0.0%
Derry Road to/from east	5.3%	4.3%	4.2%	5.3%
Britannia Road to/from east	2.9%	3.1%	3.0%	2.9%
Lower Baseline to/from east	4.3%	5.3%	5.1%	4.3%
Trafalgar Road to/from south	22.5%	19.4%	19.5%	23.0%
Lower Baseline to/from west	0.7%	0.7%	0.7%	0.6%
Britannia Road to/from west	10.3%	10.2%	9.8%	10.5%
Derry Road to/from west	8.2%	7.5%	7.6%	8.4%
Highway 401 to/from east	8.7%	7.7%	7.7%	8.7%
Highway 401 to/from west	15.1%	15.3%	15.4%	14.8%
Main Street to/from west	6.9%	6.6%	7.2%	6.6%
Louis St. Laurent to/from west	4.6%	4.4%	4.4%	4.7%
TOTAL	100.00%	100.00%	100.00%	100.00%

Appendix H Site Traffic Volume



Legend

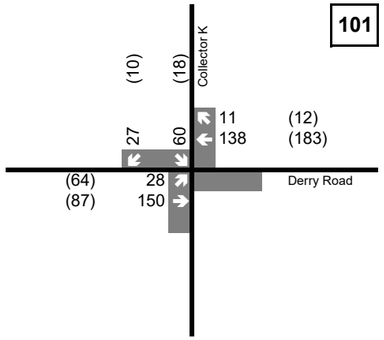
xx	A.M. Peak Hour Traffic
(xx)	P.M. Peak Hour Traffic

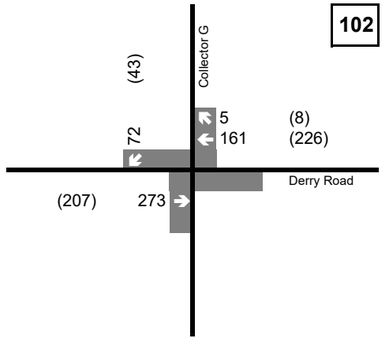
Appendix-withGO-41a

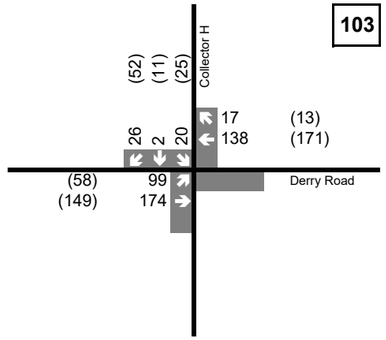
2041 Site Traffic Volumes (with GO station)

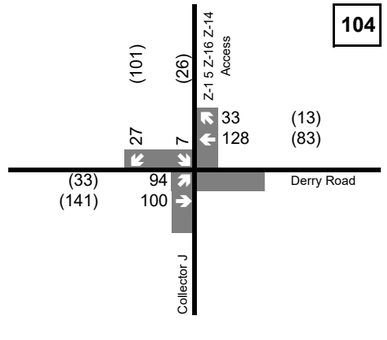
External Intersections

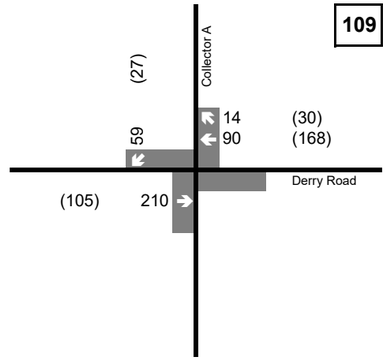
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

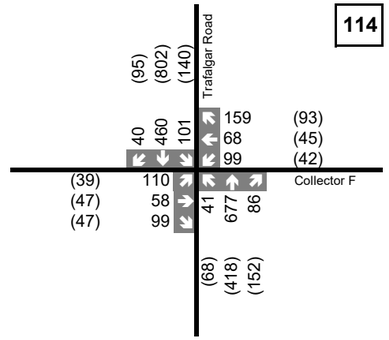


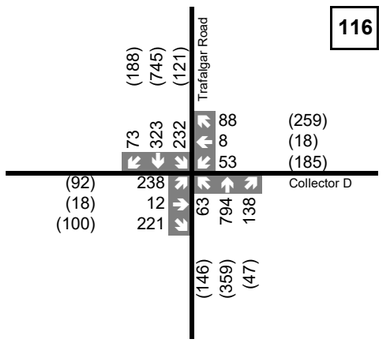


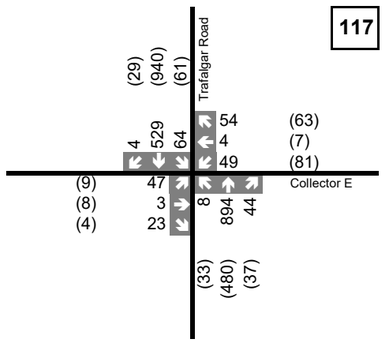












TYLin

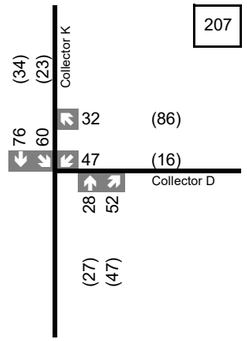
Legend

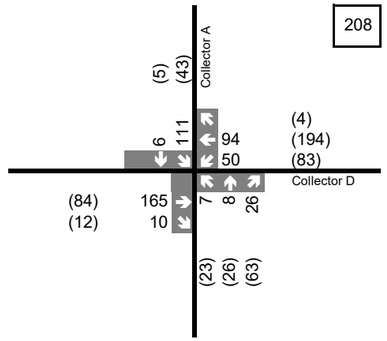
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

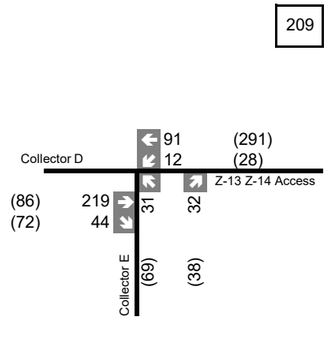
Appendix-withGO-41b

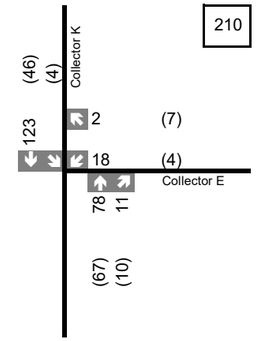
2041 Site Traffic Volumes (with GO station)
Arterial-Collector Intersections

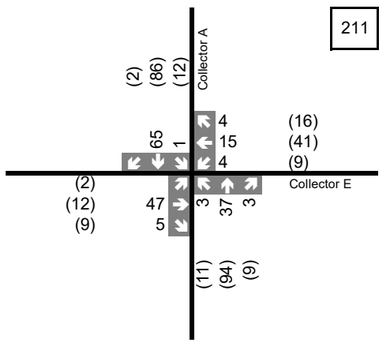
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

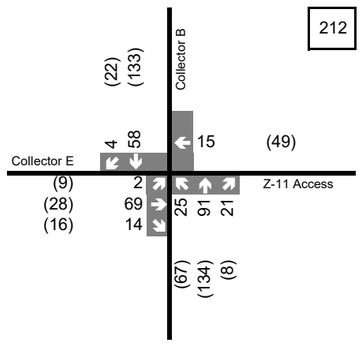


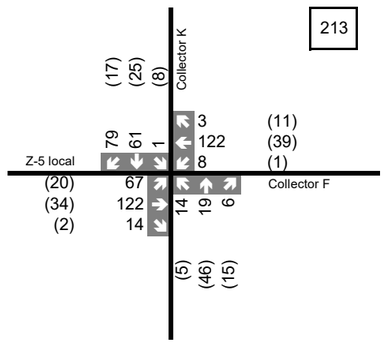


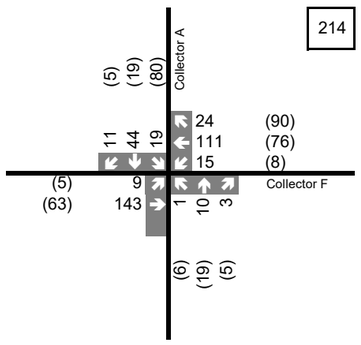


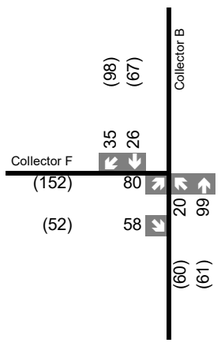


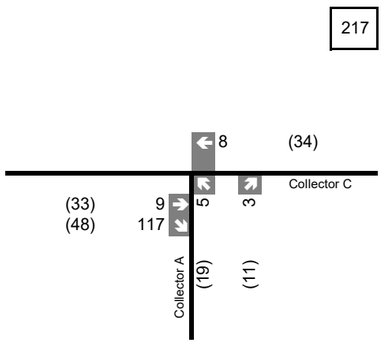












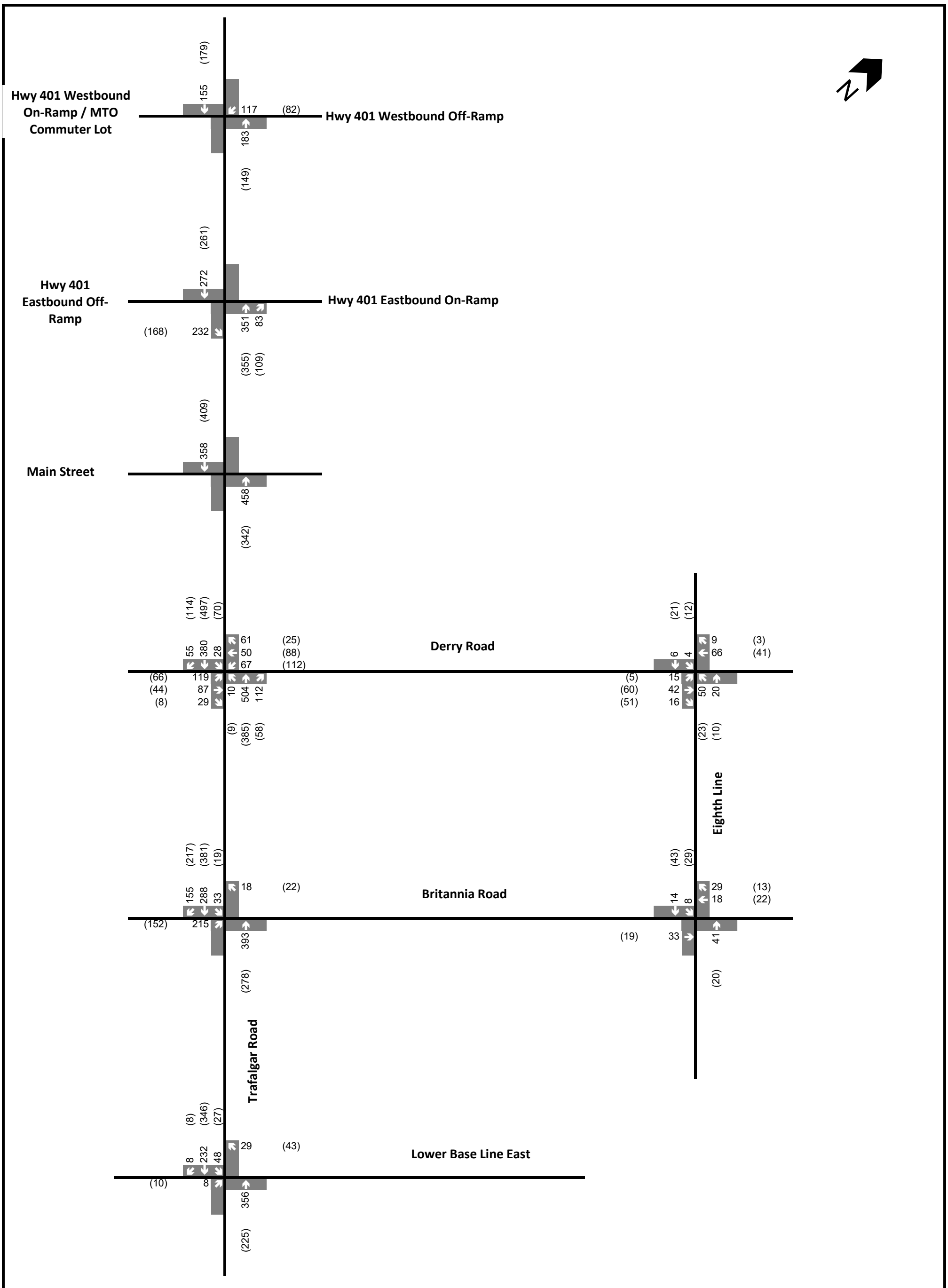
TYLin

Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Appendix-withGO-41c

2041 Site Traffic Volumes (with GO station)
Collector-Collector Intersections



Legend

xx	A.M. Peak Hour Traffic
(xx)	P.M. Peak Hour Traffic

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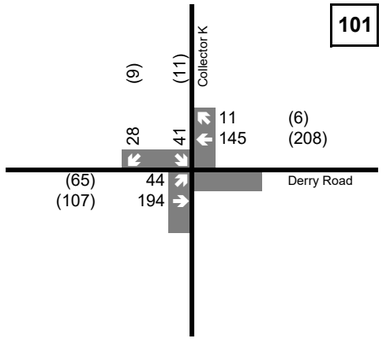
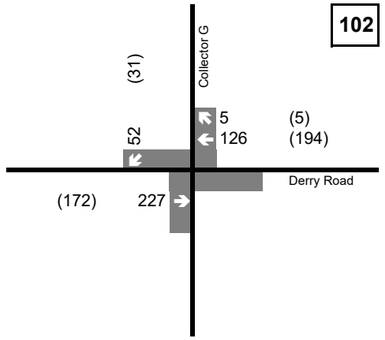
Appendix-noGO-31a

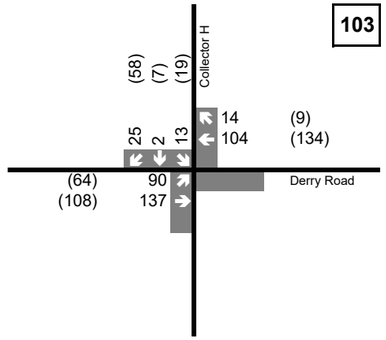
2031 Site Traffic Volumes (without GO station)

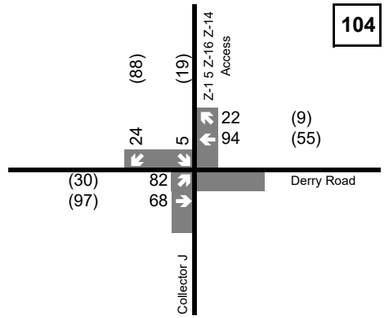
External Intersections

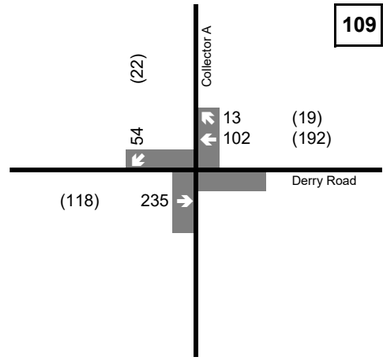
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

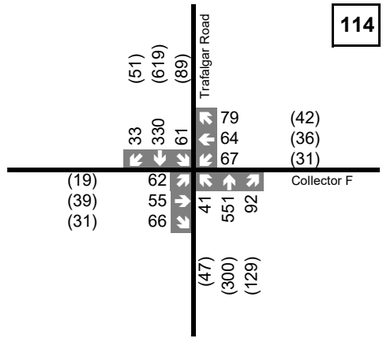


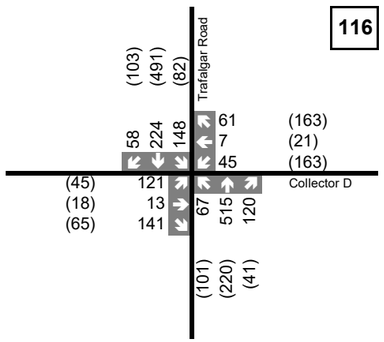


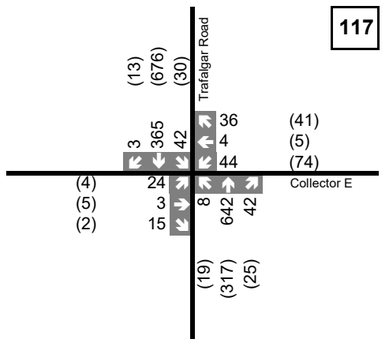


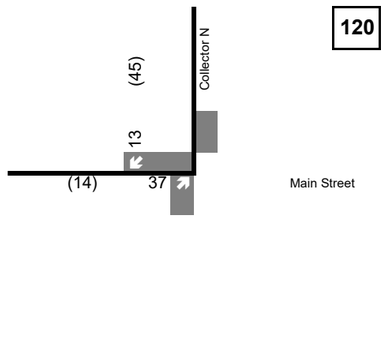












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Legend

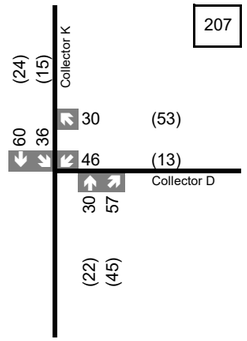
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

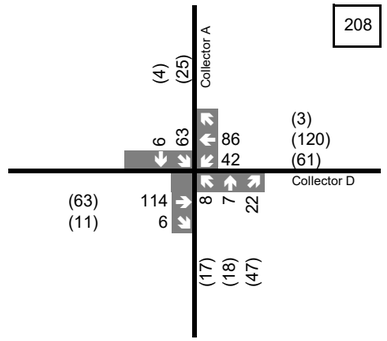
Appendix-noGO-31b

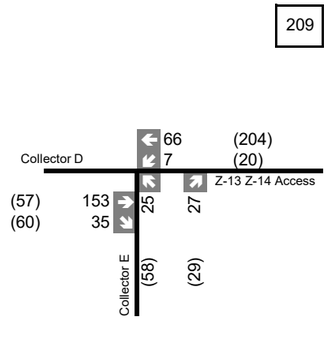
2031 Site Traffic Volumes (without GO station)

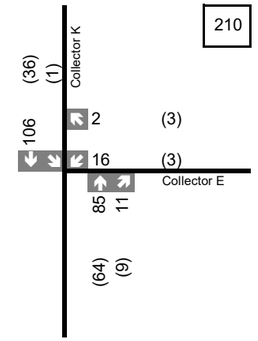
Arterial-Collector Intersections

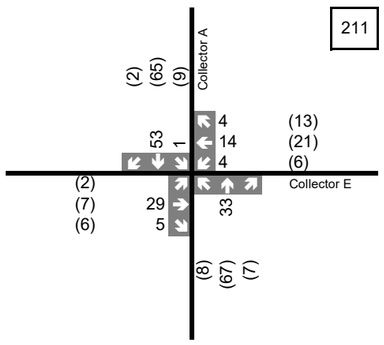
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

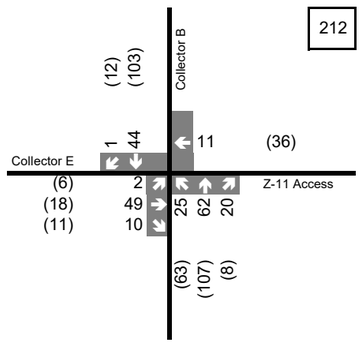


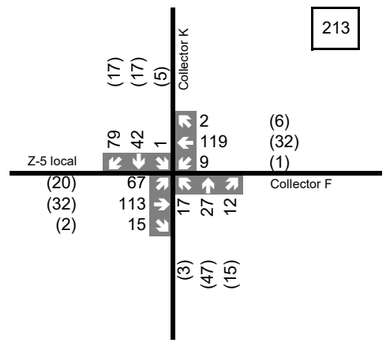


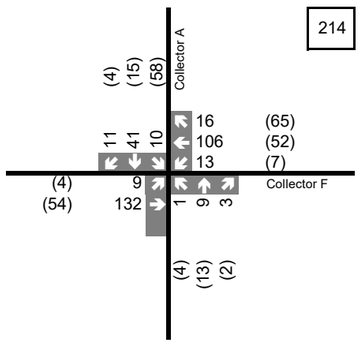


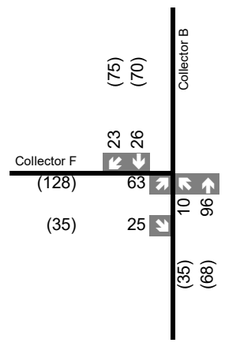


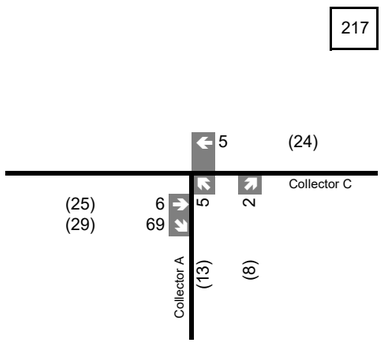












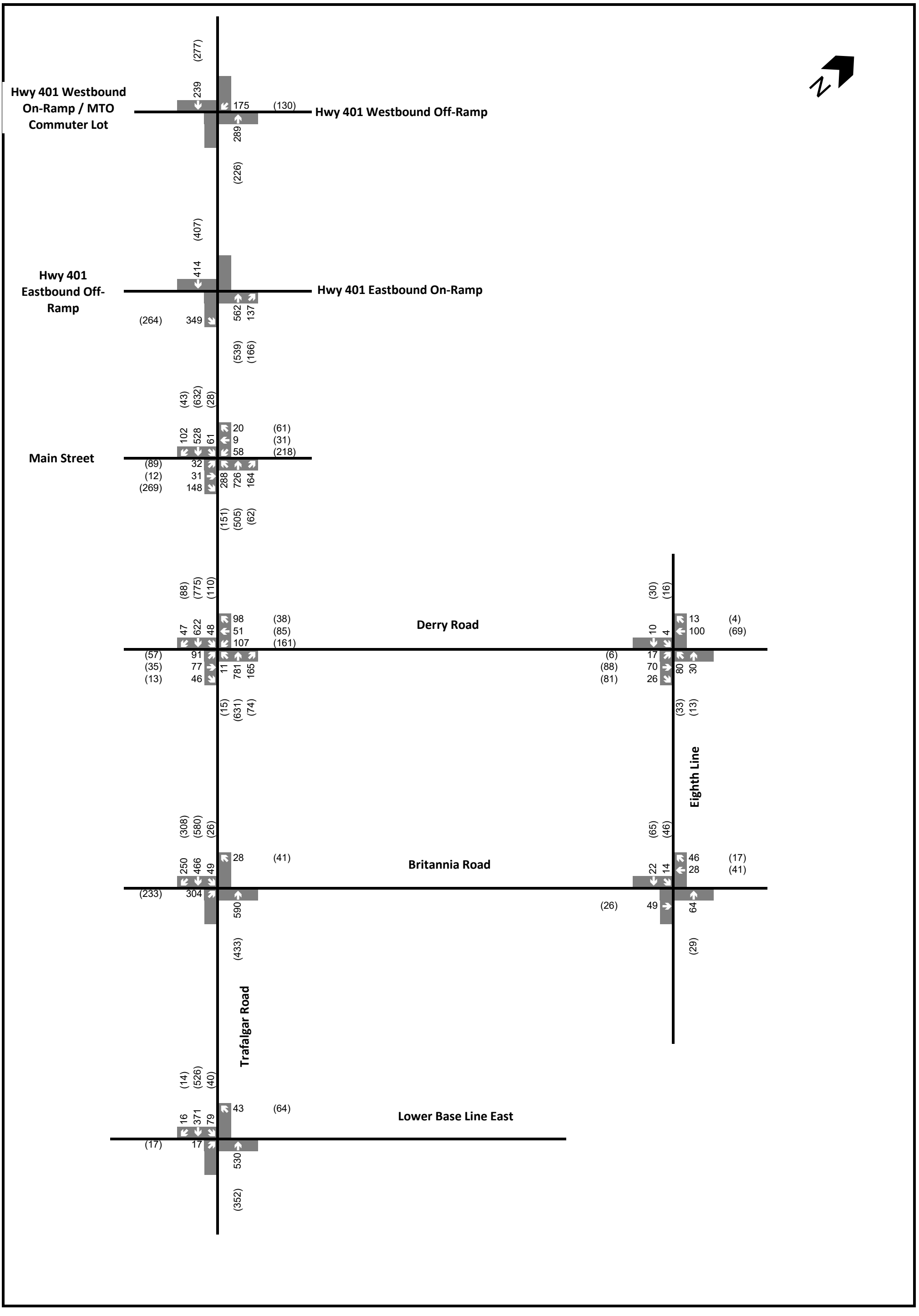
TYLin

Legend

xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Appendix-noGO-31c

2031 Site Traffic Volumes (without GO station)
Collector-Collector Intersections



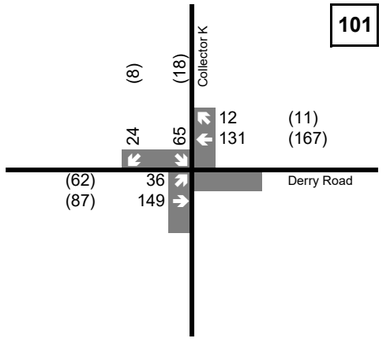
Legend

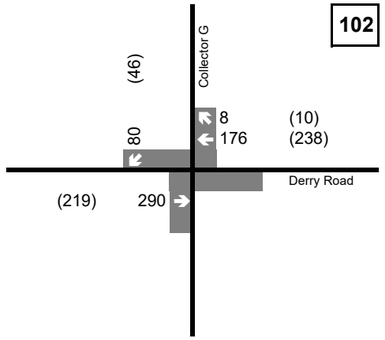
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

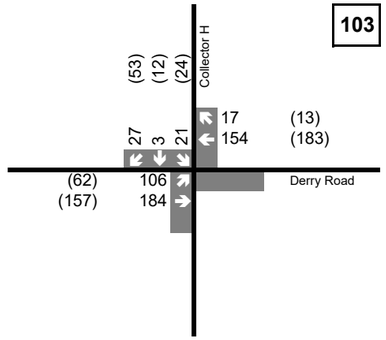
Appendix-noGO-41a

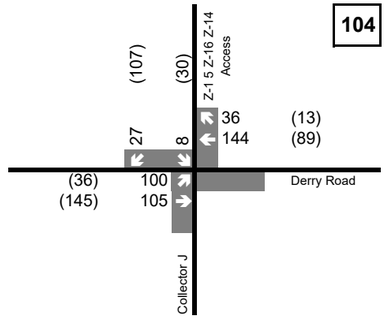
2041 Site Traffic Volumes (without GO station)
External Intersections

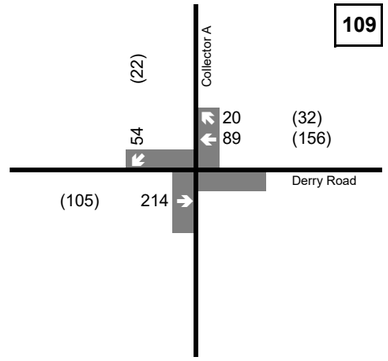
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

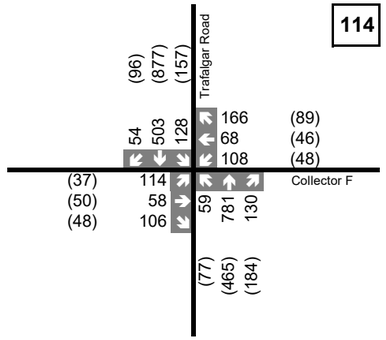












TYLin

Legend

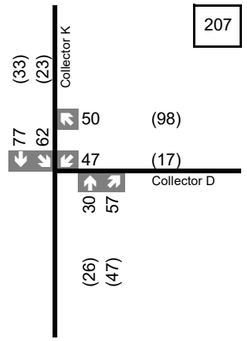
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

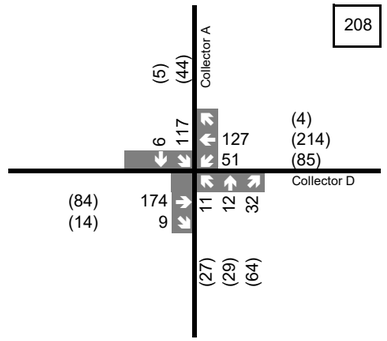
Appendix-noGO-41b

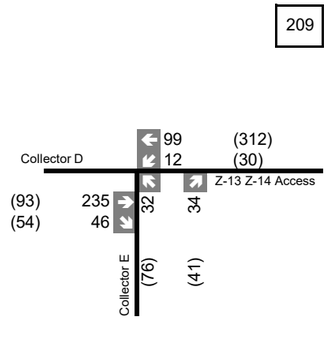
2041 Site Traffic Volumes (without GO station)

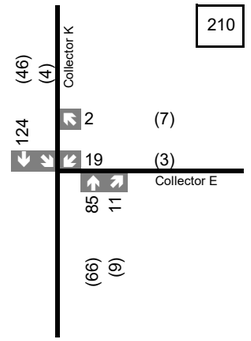
Arterial-Collector Intersections

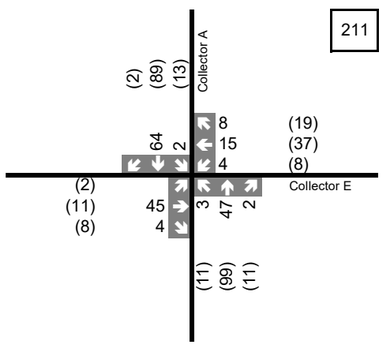
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

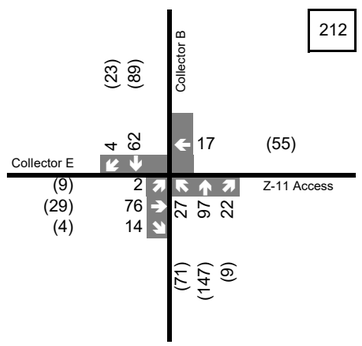


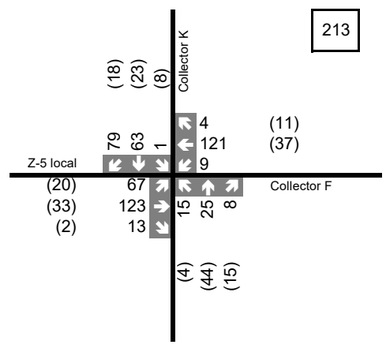


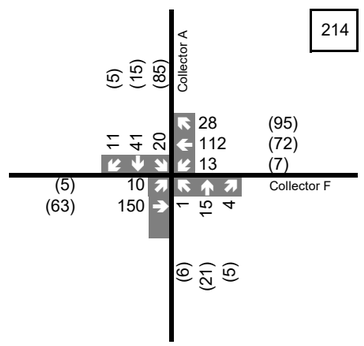


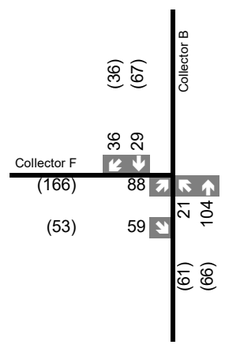


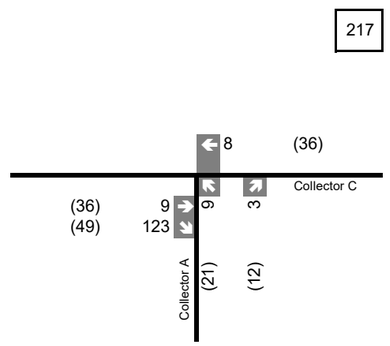












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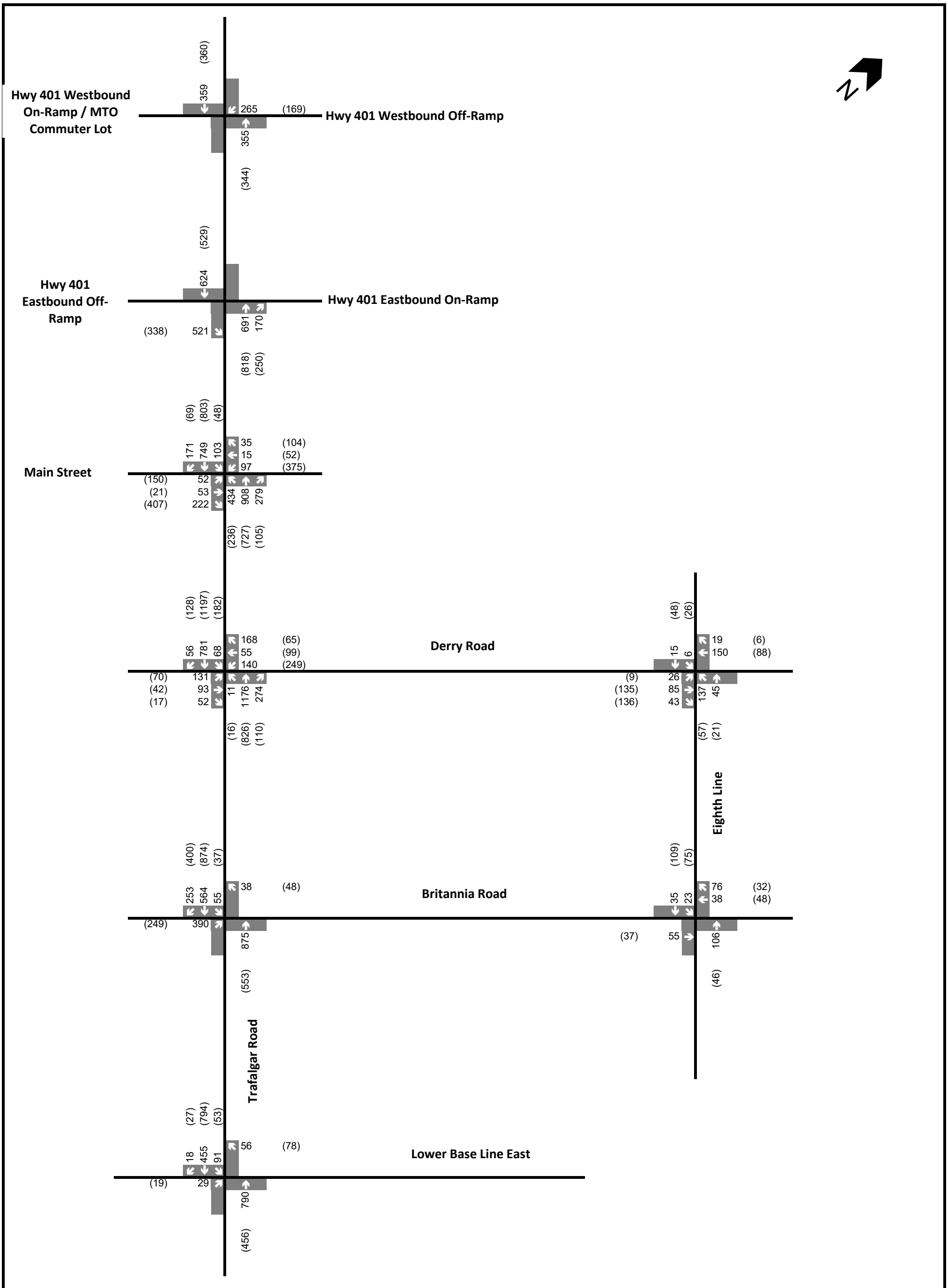
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Appendix-noGO-41c

2041 Site Traffic Volumes (without GO station)
Collector-Collector Intersections



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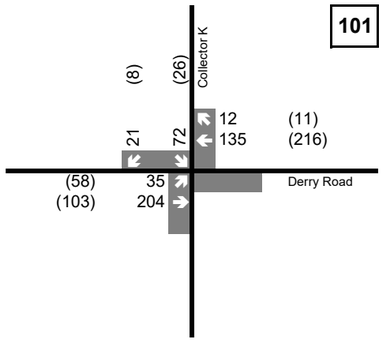
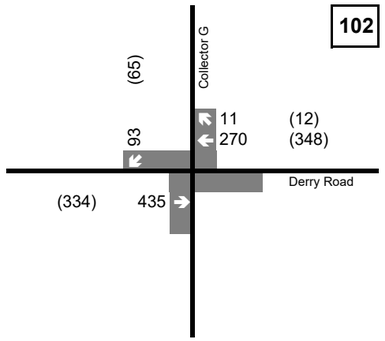
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

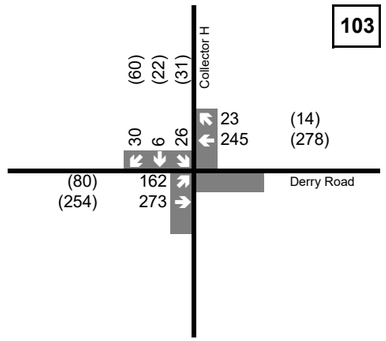
Appendix-noGO-51a

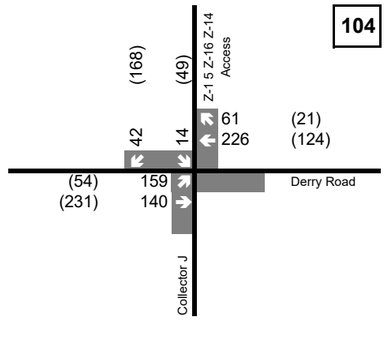
2051 Site Traffic Volumes (without GO station)
External Intersections

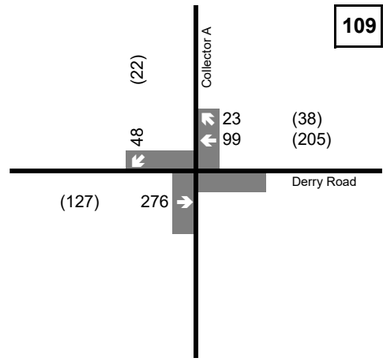
FUTURE ARTERIAL-COLLECTOR INTERSECTIONS

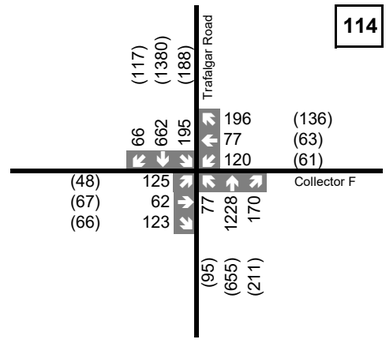


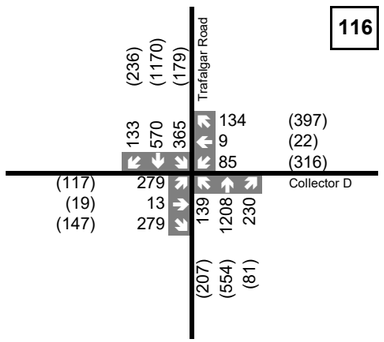


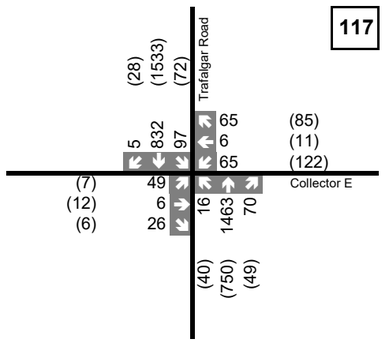


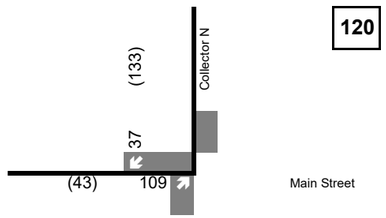












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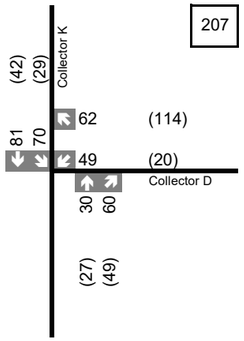
xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

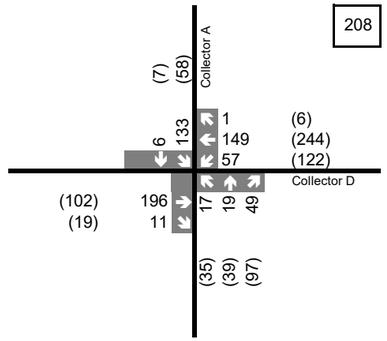
Appendix-noGO-51b

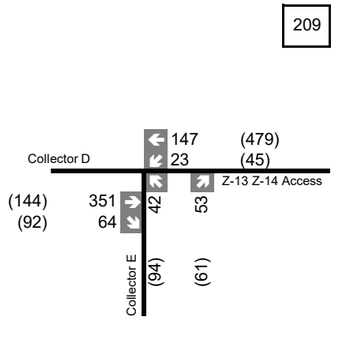
2051 Site Traffic Volumes (without GO station)

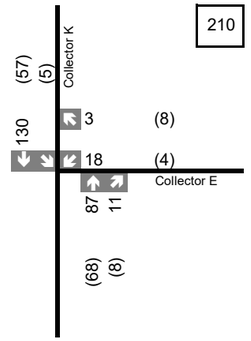
Arterial-Collector Intersections

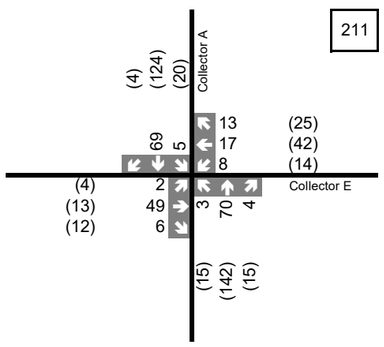
FUTURE COLLECTOR-COLLECTOR INTERSECTIONS

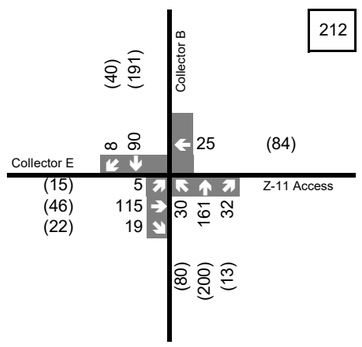


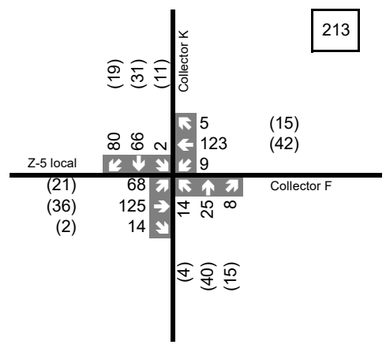


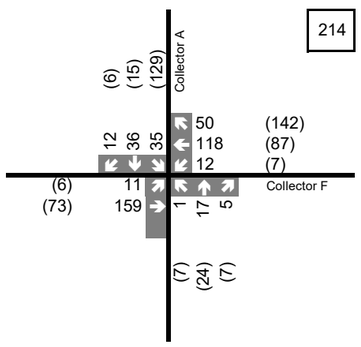


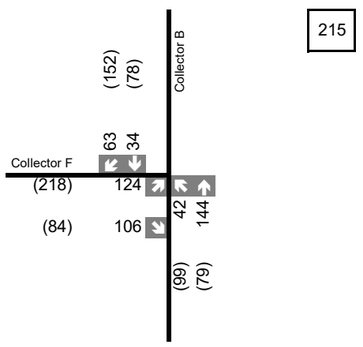


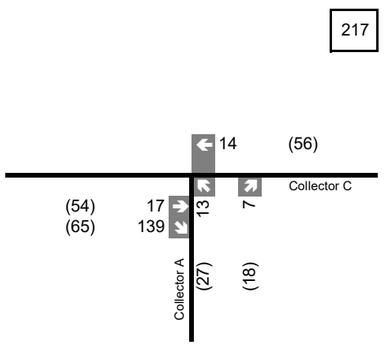












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xx A.M. Peak Hour Traffic
(xx) P.M. Peak Hour Traffic

Appendix-noGO-51c

2051 Site Traffic Volumes (without GO station)
Collector-Collector Intersections

Appendix I Future Total SYNCHRO Capacity and Queuing Analysis Reports

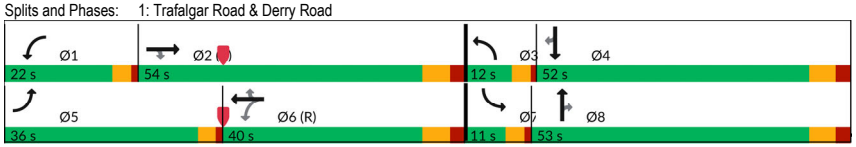
2031 Future Total

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	821	1402	293	313	527	170	141	1331	295	105	1117	115
Future Volume (vph)	821	1402	293	313	527	170	141	1331	295	105	1117	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3471	4520	1585	1789	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.950			0.117			0.950			0.950		
Satd. Flow (perm)	3471	4520	1585	220	4309	1633	3054	4175	1566	2918	4214	1268
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			123			213			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	838	1431	299	319	538	173	144	1358	301	107	1140	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	838	1431	299	319	538	173	144	1358	301	107	1140	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	36.0	54.0	54.0	22.0	40.0	40.0	12.0	53.0	53.0	11.0	52.0	52.0
Total Split (%)	25.7%	38.6%	38.6%	15.7%	28.6%	28.6%	8.6%	37.9%	37.9%	7.9%	37.1%	37.1%
Maximum Green (s)	32.0	47.1	47.1	18.0	33.1	33.1	8.0	46.2	46.2	7.0	45.2	45.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	33.0	49.1	49.1	56.0	35.1	35.1	9.0	48.2	48.2	8.0	47.2	47.2
Actuated g/C Ratio	0.24	0.35	0.35	0.40	0.25	0.25	0.06	0.34	0.34	0.06	0.34	0.34
v/c Ratio	1.02	0.90	0.46	1.06	0.50	0.35	0.73	0.95	0.44	0.64	0.80	0.23
Control Delay (s/veh)	94.1	40.5	17.4	108.1	47.2	17.6	100.1	55.7	13.7	73.0	49.9	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	94.1	40.5	17.4	108.1	47.2	17.6	100.1	55.7	13.7	73.0	49.9	13.2
LOS	F	D	B	F	D	B	F	E	B	E	D	B
Approach Delay (s/veh)		55.3			61.1			52.3			48.5	
Approach LOS		E			E			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBTL, Start of Green		
Natural Cycle: 130		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.06		
Intersection Signal Delay (s/veh): 54.0		Intersection LOS: D
Intersection Capacity Utilization 90.7%		ICU Level of Service E
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	838	1431	299	319	538	173	144	1358	301	107	1140	117
v/c Ratio	1.02	0.90	0.46	1.06	0.50	0.35	0.73	0.95	0.44	0.64	0.80	0.23
Control Delay (s/veh)	94.1	40.5	17.4	108.1	47.2	17.6	100.1	55.7	13.7	73.0	49.9	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	94.1	40.5	17.4	108.1	47.2	17.6	100.1	55.7	13.7	73.0	49.9	13.2
Queue Length 50th (m)	~126.8	131.6	25.3	~83.5	65.5	11.9	22.7	177.2	22.2	17.0	105.7	7.0
Queue Length 95th (m)	m#135.7	m144.1	m28.5	#144.5	74.0	32.6	m#35.1	m#196.7	m30.7	#28.8	156.2	29.9
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	818	1585	645	300	1080	501	196	1437	678	166	1420	509
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.90	0.46	1.06	0.50	0.35	0.73	0.95	0.44	0.64	0.80	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	821	1402	293	313	527	170	141	1331	295	105	1117	115
Future Volume (vph)	821	1402	293	313	527	170	141	1331	295	105	1117	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3471	4520	1585	1789	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.95	1.00	1.00	0.12	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3471	4520	1585	221	4309	1633	3054	4175	1566	2918	4214	1268
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	838	1431	299	319	538	173	144	1358	301	107	1140	117
RTOR Reduction (vph)	0	0	90	0	0	92	0	0	140	0	0	78
Lane Group Flow (vph)	838	1431	209	319	538	81	144	1358	161	107	1140	39
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Actuated Green, G (s)	32.0	47.1	47.1	51.1	33.1	33.1	8.0	46.2	46.2	7.0	45.2	45.2
Effective Green, g (s)	33.0	49.1	49.1	53.1	35.1	35.1	9.0	48.2	48.2	8.0	47.2	47.2
Actuated g/C Ratio	0.24	0.35	0.35	0.38	0.25	0.25	0.06	0.34	0.34	0.06	0.34	0.34
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	818	1585	555	296	1080	409	196	1437	539	166	1420	427
v/s Ratio Prot	c0.24	0.32		c0.15	0.12		c0.05	c0.33		0.04	0.27	
v/s Ratio Perm			0.13	c0.26		0.05			0.10			0.03
v/c Ratio	1.02	0.90	0.38	1.08	0.50	0.20	0.73	0.95	0.30	0.64	0.80	0.09
Uniform Delay, d1	53.5	43.2	34.0	42.2	44.9	41.3	64.3	44.6	33.6	64.6	42.2	31.7
Progression Factor	1.38	0.86	0.90	0.98	1.01	1.13	1.30	1.00	1.16	0.87	1.07	2.61
Incremental Delay, d2	24.1	3.1	0.6	73.4	1.6	1.0	12.4	10.7	0.5	10.5	3.6	0.2
Delay (s)	97.9	40.2	31.3	114.9	46.9	47.9	96.2	55.1	39.4	66.5	48.5	82.9
Level of Service	F	D	C	F	D	D	F	E	D	E	D	F
Approach Delay (s/veh)		58.0			68.2			55.8			52.9	
Approach LOS		E			E			E			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	57.9	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.99			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	90.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

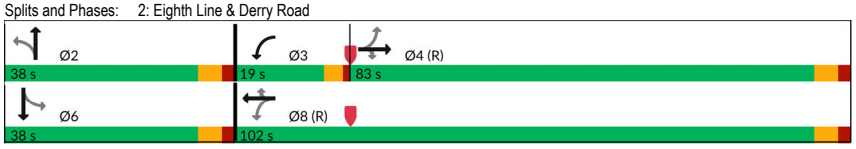
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1526	94	78	893	16	68	20	47	7	6	9
Future Volume (vph)	31	1526	94	78	893	16	68	20	47	7	6	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.895			0.910	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1652	0	1217	1592	0
Flt Permitted	0.258			0.095			0.748			0.711		
Satd. Flow (perm)	349	4520	1601	183	4391	1633	1437	1652	0	911	1592	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			86			23		49			9	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Adj. Flow (vph)	32	1590	98	81	930	17	71	21	49	7	6	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	1590	98	81	930	17	71	70	0	7	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		36.0	36.0	
Total Split (s)	83.0	83.0	83.0	19.0	102.0	102.0	38.0	38.0		38.0	38.0	
Total Split (%)	59.3%	59.3%	59.3%	13.6%	72.9%	72.9%	27.1%	27.1%		27.1%	27.1%	
Maximum Green (s)	77.0	77.0	77.0	15.0	96.0	96.0	32.0	32.0		32.0	32.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0		0	0	
Act Effct Green (s)	102.9	102.9	102.9	117.1	115.1	115.1	12.9	12.9		12.9	12.9	
Actuated g/C Ratio	0.74	0.74	0.74	0.84	0.82	0.82	0.09	0.09		0.09	0.09	
v/c Ratio	0.13	0.48	0.08	0.33	0.26	0.01	0.54	0.36		0.08	0.10	
Control Delay (s/veh)	4.5	14.6	2.1	5.7	3.1	0.8	65.1	26.0		58.1	36.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	4.5	14.6	2.1	5.7	3.1	0.8	65.1	26.0		58.1	36.0	
LOS	A	B	A	A	A	A	E	C		E	D	
Approach Delay (s/veh)		13.7			3.3			45.7			43.0	
Approach LOS		B			A			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 85		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.54		
Intersection Signal Delay (s/veh): 11.8	Intersection LOS: B	
Intersection Capacity Utilization 59.4%	ICU Level of Service B	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	32	1590	98	81	930	17	71	70	7	15
v/c Ratio	0.13	0.48	0.08	0.33	0.26	0.01	0.54	0.36	0.08	0.10
Control Delay (s/veh)	4.5	14.6	2.1	5.7	3.1	0.8	65.1	26.0	58.1	36.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.5	14.6	2.1	5.7	3.1	0.8	65.1	26.0	58.1	36.0
Queue Length 50th (m)	5.0	176.2	6.4	2.9	19.7	0.0	20.0	9.7	2.5	1.6
Queue Length 95th (m)	m1.1	44.4	m1.3	6.9	30.3	1.2	36.5	23.5	9.2	8.4
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	256	3320	1199	328	3610	1346	328	415	208	370
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.48	0.08	0.25	0.26	0.01	0.22	0.17	0.03	0.04

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1526	94	78	893	16	68	20	47	7	6	9
Future Volume (vph)	31	1526	94	78	893	16	68	20	47	7	6	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90		1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1652		1217	1592	
Flt Permitted	0.26	1.00	1.00	0.10	1.00	1.00	0.75	1.00		0.71	1.00	
Satd. Flow (perm)	349	4520	1601	183	4391	1633	1436	1652		911	1592	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	32	1590	98	81	930	17	71	21	49	7	6	9
RTOR Reduction (vph)	0	0	23	0	0	3	0	44	0	0	8	0
Lane Group Flow (vph)	32	1590	75	81	930	14	71	26	0	7	7	0
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	102.8	102.8	102.8	115.1	115.1	115.1	12.9	12.9		12.9	12.9	
Effective Green, g (s)	102.8	102.8	102.8	115.1	115.1	115.1	12.9	12.9		12.9	12.9	
Actuated g/C Ratio	0.73	0.73	0.73	0.82	0.82	0.82	0.09	0.09		0.09	0.09	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	256	3318	1175	247	3610	1342	132	152		83	146	
v/s Ratio Prot		c0.35		c0.02	0.21			0.02			0.00	
v/s Ratio Perm	0.09		0.05	0.25		0.01	c0.05			0.01		
v/c Ratio	0.13	0.48	0.06	0.33	0.26	0.01	0.54	0.17		0.08	0.05	
Uniform Delay, d1	5.4	7.6	5.2	4.5	2.8	2.2	60.7	58.6		58.1	57.9	
Progression Factor	0.53	1.75	1.14	1.00	1.00	1.00	0.83	0.93		1.00	1.00	
Incremental Delay, d2	0.8	0.4	0.1	0.8	0.2	0.0	4.2	0.5		0.4	0.1	
Delay (s)	3.6	13.7	6.0	5.3	3.0	2.2	54.8	54.9		58.6	58.1	
Level of Service	A	B	A	A	A	A	D	D		E	E	
Approach Delay (s/veh)		13.1			3.1			54.8			58.2	
Approach LOS		B			A			D			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	11.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.48			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	59.4%	ICU Level of Service	B	
Analysis Period (min)	15			

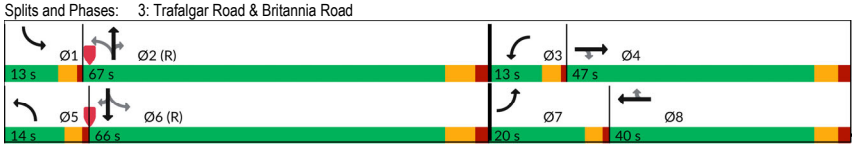
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	369	711	363	180	322	99	181	1319	223	79	1663	249
Future Volume (vph)	369	711	363	180	322	99	181	1319	223	79	1663	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	1478	4254	1566	1491	4295	1365
Flt Permitted	0.950			0.950			0.063			0.121		
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	98	4254	1566	190	4295	1365
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136			125			191			252
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	373	718	367	182	325	100	183	1332	225	80	1680	252
Shared Lane Traffic (%)												
Lane Group Flow (vph)	373	718	367	182	325	100	183	1332	225	80	1680	252
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	20.0	47.0	47.0	13.0	40.0	40.0	14.0	67.0	67.0	13.0	66.0	66.0
Total Split (%)	14.3%	33.6%	33.6%	9.3%	28.6%	28.6%	10.0%	47.9%	47.9%	9.3%	47.1%	47.1%
Maximum Green (s)	16.0	41.0	41.0	9.0	34.0	34.0	10.0	60.0	60.0	9.0	59.0	59.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	17.0	33.4	33.4	10.0	26.4	26.4	86.2	72.3	72.3	72.9	61.6	61.6
Actuated g/C Ratio	0.12	0.24	0.24	0.07	0.19	0.19	0.62	0.52	0.52	0.52	0.44	0.44
v/c Ratio	0.91	0.67	0.77	0.73	0.39	0.24	0.71	0.61	0.25	0.43	0.89	0.34
Control Delay (s/veh)	87.6	51.1	41.7	71.2	46.7	19.5	53.6	43.0	19.7	15.7	36.8	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	87.6	51.1	41.7	71.2	46.7	19.5	53.6	43.0	19.7	15.7	36.8	5.4
LOS	F	D	D	E	D	B	D	D	B	B	D	A
Approach Delay (s/veh)		58.1			49.6			41.1			32.0	
Approach LOS		E			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 43.1		Intersection LOS: D	
Intersection Capacity Utilization 79.4%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	373	718	367	182	325	100	183	1332	225	80	1680	252
v/c Ratio	0.91	0.67	0.77	0.73	0.39	0.24	0.71	0.61	0.25	0.43	0.89	0.34
Control Delay (s/veh)	87.6	51.1	41.7	71.2	46.7	19.5	53.6	43.0	19.7	15.7	36.8	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	87.6	51.1	41.7	71.2	46.7	19.5	53.6	43.0	19.7	15.7	36.8	5.4
Queue Length 50th (m)	55.5	78.6	65.5	26.1	35.7	4.1	52.5	123.7	24.0	4.7	203.1	21.1
Queue Length 95th (m)	#85.1	85.7	94.6	#42.2	47.2	24.0	m#66.5	m134.0	m29.1	m9.7	m214.5	m25.3
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	409	1374	571	250	1139	512	257	2196	901	194	1890	741
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.52	0.64	0.73	0.29	0.20	0.71	0.61	0.25	0.41	0.89	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	369	711	363	180	322	99	181	1319	223	79	1663	249
Future Volume (vph)	369	711	363	180	322	99	181	1319	223	79	1663	249
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	1478	4254	1566	1491	4295	1365
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.06	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	98	4254	1566	191	4295	1365
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	373	718	367	182	325	100	183	1332	225	80	1680	252
RTOR Reduction (vph)	0	0	104	0	0	81	0	0	92	0	0	141
Lane Group Flow (vph)	373	718	263	182	325	19	183	1332	133	80	1680	111
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Actuated Green, G (s)	16.0	31.4	31.4	9.0	24.4	24.4	82.6	70.3	70.3	67.9	59.6	59.6
Effective Green, g (s)	17.0	33.4	33.4	10.0	26.4	26.4	83.6	72.3	72.3	69.9	61.6	61.6
Actuated g/C Ratio	0.12	0.24	0.24	0.07	0.19	0.19	0.60	0.52	0.52	0.50	0.44	0.44
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	409	1067	370	250	835	307	255	2196	808	181	1889	600
v/s Ratio Prot	c0.11	0.16		0.05	0.07		c0.10	0.31		0.03	c0.39	
v/s Ratio Perm			c0.17			0.01	0.33		0.08	0.19		0.08
v/c Ratio	0.91	0.67	0.71	0.73	0.39	0.06	0.72	0.61	0.16	0.44	0.89	0.18
Uniform Delay, d1	60.8	48.3	48.9	63.7	49.7	46.6	39.6	23.8	17.9	19.6	36.1	23.9
Progression Factor	1.00	1.00	1.00	0.85	0.93	5.41	1.44	1.68	4.19	0.79	0.87	1.62
Incremental Delay, d2	24.2	1.7	6.4	10.0	0.3	0.1	4.3	0.6	0.2	1.2	5.0	0.5
Delay (s)	85.0	50.0	55.2	64.1	46.6	252.2	61.2	40.7	75.2	16.8	36.4	39.3
Level of Service	F	D	E	E	D	F	E	D	E	B	D	D
Approach Delay (s/veh)		60.3			85.7			47.3			36.0	
Approach LOS		E			F			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	50.6	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.84			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	79.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

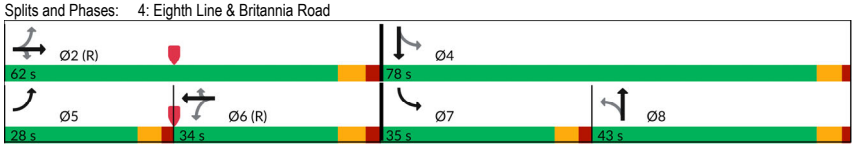
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	964	11	21	566	44	15	81	22	38	96	18
Future Volume (vph)	23	964	11	21	566	44	15	81	22	38	96	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.969			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1777	0	1825	1875	0
Flt Permitted	0.361			0.242			0.682			0.435		
Satd. Flow (perm)	694	4476	1306	465	4476	1633	1202	1777	0	836	1875	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		9			10	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	23	984	11	21	578	45	15	83	22	39	98	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	23	984	11	21	578	45	15	105	0	39	117	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	28.0	62.0	62.0	34.0	34.0	34.0	43.0	43.0		35.0	78.0	
Total Split (%)	20.0%	44.3%	44.3%	24.3%	24.3%	24.3%	30.7%	30.7%		25.0%	55.7%	
Maximum Green (s)	22.0	55.2	55.2	27.2	27.2	27.2	37.3	37.3		29.0	72.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	100.7	99.9	99.9	92.5	92.5	92.5	15.7	15.7		27.3	27.6	
Actuated g/C Ratio	0.72	0.71	0.71	0.66	0.66	0.66	0.11	0.11		0.20	0.20	
v/c Ratio	0.04	0.31	0.01	0.07	0.20	0.04	0.11	0.51		0.18	0.31	
Control Delay (s/veh)	18.9	24.1	2.4	12.9	11.0	0.1	57.6	62.0		38.0	36.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	18.9	24.1	2.4	12.9	11.0	0.1	57.6	62.0		38.0	36.7	
LOS	B	C	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		23.8			10.3			61.4			37.0	
Approach LOS		C			B			E			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.51		
Intersection Signal Delay (s/veh): 22.7		Intersection LOS: C
Intersection Capacity Utilization 61.9%		ICU Level of Service B
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	984	11	21	578	45	15	105	39	117
v/c Ratio	0.04	0.31	0.01	0.07	0.20	0.04	0.11	0.51	0.18	0.31
Control Delay (s/veh)	18.9	24.1	2.4	12.9	11.0	0.1	57.6	62.0	38.0	36.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.9	24.1	2.4	12.9	11.0	0.1	57.6	62.0	38.0	36.7
Queue Length 50th (m)	3.7	80.1	0.0	2.2	28.5	0.0	3.9	25.3	9.0	26.4
Queue Length 95th (m)	m8.2	102.2	m0.7	6.9	41.0	0.0	m10.2	44.4	14.8	32.4
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	676	3193	951	307	2956	1117	320	480	386	973
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.31	0.01	0.07	0.20	0.04	0.05	0.22	0.10	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	964	11	21	566	44	15	81	22	38	96	18
Future Volume (vph)	23	964	11	21	566	44	15	81	22	38	96	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1776		1825	1874	
Flt Permitted	0.36	1.00	1.00	0.24	1.00	1.00	0.68	1.00		0.44	1.00	
Satd. Flow (perm)	694	4476	1306	465	4476	1633	1202	1776		836	1874	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	23	984	11	21	578	45	15	83	22	39	98	19
RTOR Reduction (vph)	0	0	3	0	0	16	0	8	0	0	8	0
Lane Group Flow (vph)	23	984	8	21	578	29	15	97	0	39	109	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	98.7	98.7	98.7	88.9	88.9	88.9	15.7	15.7		28.8	28.8	
Effective Green, g (s)	98.7	98.7	98.7	88.9	88.9	88.9	15.7	15.7		28.8	28.8	
Actuated g/C Ratio	0.71	0.71	0.71	0.64	0.64	0.64	0.11	0.11		0.21	0.21	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	519	3155	920	295	2842	1036	134	199		222	385	
v/s Ratio Prot	0.00	c0.22			0.13			c0.05		0.01	c0.06	
v/s Ratio Perm	0.03		0.01	0.05		0.02	0.01			0.03		
v/c Ratio	0.04	0.31	0.01	0.07	0.20	0.03	0.11	0.49		0.18	0.28	
Uniform Delay, d1	6.4	7.8	6.1	9.8	10.7	9.5	55.9	58.4		45.4	46.9	
Progression Factor	2.66	2.98	1.00	1.00	1.00	1.00	1.00	1.00		0.84	0.82	
Incremental Delay, d2	0.0	0.2	0.0	0.5	0.2	0.0	0.4	1.8		0.4	0.4	
Delay (s)	16.9	23.5	6.1	10.2	10.9	9.5	56.5	59.9		38.4	38.9	
Level of Service	B	C	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		23.2			10.8			59.5			38.8	
Approach LOS		C			B			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	22.5	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.36				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		24.5	
Intersection Capacity Utilization	61.9%	ICU Level of Service		B	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	312	63	217	130	139	42	1454	198	414	1832	73
Future Volume (vph)	117	312	63	217	130	139	42	1454	198	414	1832	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt		0.975			0.922				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	1851	0	1789	1702	0	1631	4214	1551	1711	4295	1521
Flt Permitted	0.361			0.125			0.080			0.076		
Satd. Flow (perm)	660	1851	0	235	1702	0	137	4214	1551	137	4295	1521
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			36				135			95
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	122	325	66	226	135	145	42	1454	198	431	1908	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	391	0	226	280	0	42	1454	198	431	1908	76
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		7.0	10.0		5.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2		11.5	24.2		9.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	13.8	33.6		18.0	37.8		9.6	55.4	55.4	33.0	78.8	78.8
Total Split (%)	9.9%	24.0%		12.9%	27.0%		6.9%	39.6%	39.6%	23.6%	56.3%	56.3%
Maximum Green (s)	9.3	27.4		13.5	31.6		5.1	48.8	48.8	29.0	72.2	72.2
Yellow Time (s)	3.5	4.2		3.5	4.2		3.5	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2		3.5	4.2		3.5	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0							
Flash Don't Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	40.2	29.4		48.1	33.8		57.9	50.8	50.8	85.4	76.2	76.2
Actuated g/C Ratio	0.29	0.21		0.34	0.24		0.41	0.36	0.36	0.61	0.54	0.54
v/c Ratio	0.46	0.99		0.94	0.64		0.35	0.95	0.31	1.03	0.82	0.09
Control Delay (s/veh)	39.0	97.2		97.7	51.7		24.2	57.4	11.9	78.9	50.6	11.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	97.2		97.7	51.7		24.2	57.4	11.9	78.9	50.6	11.1
LOS	D	F		F	D		C	E	B	E	D	B
Approach Delay (s/veh)		83.4			72.2			51.3			54.4	
Approach LOS		F			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 58.0		Intersection LOS: E	
Intersection Capacity Utilization 97.3%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	122	391	226	280	42	1454	198	431	1908	76
v/c Ratio	0.46	0.99	0.94	0.64	0.35	0.95	0.31	1.03	0.82	0.09
Control Delay (s/veh)	39.0	97.2	97.7	51.7	24.2	57.4	11.9	78.9	50.6	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.0	97.2	97.7	51.7	24.2	57.4	11.9	78.9	50.6	11.1
Queue Length 50th (m)	24.8	108.2	58.6	48.1	4.7	171.6	11.8	~113.6	221.6	4.8
Queue Length 95th (m)	41.0	#174.6	#98.4	89.3	10.0	#209.9	30.7 m	#157.5	241.0	m7.7
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	269	394	241	438	121	1529	648	420	2337	870
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.99	0.94	0.64	0.35	0.95	0.31	1.03	0.82	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	312	63	217	130	139	42	1454	198	414	1832	73
Future Volume (vph)	117	312	63	217	130	139	42	1454	198	414	1832	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2		3.5	4.2		3.5	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	0.97		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1738	1851		1789	1703		1631	4214	1551	1711	4295	1521
Flt Permitted	0.36	1.00		0.13	1.00		0.08	1.00	1.00	0.08	1.00	1.00
Satd. Flow (perm)	660	1851		236	1703		138	4214	1551	136	4295	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	122	325	66	226	135	145	42	1454	198	431	1908	76
RTOR Reduction (vph)	0	6	0	0	27	0	0	0	86	0	0	35
Lane Group Flow (vph)	122	385	0	226	253	0	42	1454	112	431	1908	41
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	36.5	27.4		45.3	31.8		52.8	48.8	48.8	81.8	73.3	73.3
Effective Green, g (s)	38.5	29.4		46.4	33.8		54.8	50.8	50.8	82.8	75.3	75.3
Actuated g/C Ratio	0.28	0.21		0.33	0.24		0.39	0.36	0.36	0.59	0.54	0.54
Clearance Time (s)	4.5	6.2		4.5	6.2		4.5	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Lane Grp Cap (vph)	259	388		239	411		107	1529	562	417	2310	818
v/s Ratio Prot	0.03	0.21		c0.10	0.15		0.01	0.35		c0.22	0.44	
v/s Ratio Perm	0.10			c0.22			0.14		0.07	c0.39		0.03
v/c Ratio	0.47	0.99		0.95	0.61		0.39	0.95	0.20	1.03	0.83	0.05
Uniform Delay, d1	40.1	55.2		39.0	47.3		28.7	43.4	30.6	45.5	26.9	15.4
Progression Factor	1.00	1.00		1.58	1.07		1.00	1.00	1.00	0.90	1.79	6.25
Incremental Delay, d2	1.4	43.9		41.3	3.7		0.9	14.0	0.8	43.5	2.2	0.1
Delay (s)	41.4	99.1		102.9	54.5		29.6	57.4	31.4	84.2	50.5	96.1
Level of Service	D	F		F	D		C	E	C	F	D	F
Approach Delay (s/veh)		85.4			76.1			53.6			57.9	
Approach LOS		F			E			D			E	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	61.1	HCM 2000 Level of Service	E		
HCM 2000 Volume to Capacity ratio	1.03				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.8		
Intersection Capacity Utilization	97.3%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

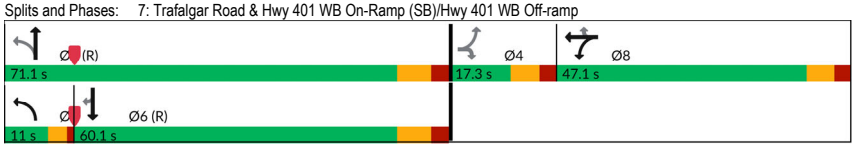
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	297	6	280	11	609	0	0	1248	117
Future Volume (vph)	0	0	5	297	6	280	11	609	0	0	1248	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1633	2879	1921	2456	1825	3941	0	0	4309	1276
Flt Permitted				0.950			0.145					
Satd. Flow (perm)	1883	0	1633	2879	1921	2456	279	3941	0	0	4309	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			203			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Adj. Flow (vph)	0	0	5	297	6	280	11	609	0	0	1248	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	5	297	6	280	11	609	0	0	1248	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	18.5	18.5	18.5	102.4	98.3			93.9	93.9
Actuated g/C Ratio			0.07	0.14	0.14	0.14	0.76	0.73			0.69	0.69
v/c Ratio			0.02	0.76	0.02	0.49	0.04	0.21			0.42	0.13
Control Delay (s/veh)			0.0	68.4	48.0	8.3	7.2	7.4			11.8	2.5
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.0	68.4	48.0	8.3	7.2	7.4			11.8	2.5
LOS			A	E	D	A	A	A			B	A
Approach Delay (s/veh)					39.3			7.4			11.0	
Approach LOS					D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 16.5		Intersection LOS: B	
Intersection Capacity Utilization 59.7%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	5	297	6	280	11	609	1248	117
v/c Ratio	0.02	0.76	0.02	0.49	0.04	0.21	0.42	0.13
Control Delay (s/veh)	0.0	68.4	48.0	8.3	7.2	7.4	11.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.0	68.4	48.0	8.3	7.2	7.4	11.8	2.5
Queue Length 50th (m)	0.0	47.3	1.4	0.0	0.6	19.9	45.2	0.0
Queue Length 95th (m)	0.0	62.9	5.4	15.0	3.5	45.6	117.7	10.7
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	308	849	567	922	290	2858	2986	922
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.35	0.01	0.30	0.04	0.21	0.42	0.13

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	5	297	6	280	11	609	0	0	1248	117
Future Volume (vph)	0	0	5	297	6	280	11	609	0	0	1248	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3941			4309	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.14	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	278	3941			4309	1276
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	5	297	6	280	11	609	0	0	1248	117
RTOR Reduction (vph)	0	0	5	0	0	242	0	0	0	0	0	43
Lane Group Flow (vph)	0	0	0	297	6	38	11	609	0	0	1248	74
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	18.5	18.5	18.5	92.5	92.5			85.7	85.7
Effective Green, g (s)			2.0	18.5	18.5	18.5	92.5	92.5			85.7	85.7
Actuated g/C Ratio			0.01	0.14	0.14	0.14	0.68	0.68			0.63	0.63
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	393	262	335	221	2690			2725	807
v/s Ratio Prot				c0.10	0.00		0.00	c0.15			c0.29	
v/s Ratio Perm			c0.00			0.02	0.03					0.06
v/c Ratio			0.00	0.76	0.02	0.11	0.05	0.23			0.46	0.09
Uniform Delay, d1			65.8	56.3	50.7	51.3	7.9	8.1			12.9	9.7
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	7.2	0.0	0.1	0.0	0.2			0.6	0.2
Delay (s)			65.8	63.5	50.7	51.4	7.9	8.3			13.4	9.9
Level of Service			E	E	D	D	A	A			B	A
Approach Delay (s/veh)		65.8			57.5			8.3			13.1	
Approach LOS		E			E			A			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	22.1	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.50				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)		26.5	
Intersection Capacity Utilization	59.7%	ICU Level of Service		B	
Analysis Period (min)	15				
c Critical Lane Group					

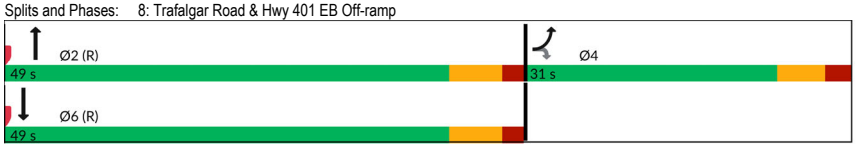
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	650	0	1031	812	0
Future Volume (vph)	114	650	0	1031	812	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.889	0.850				
Flt Protected	0.987					
Satd. Flow (prot)	2821	1339	0	4154	4117	0
Flt Permitted	0.987					
Satd. Flow (perm)	2821	1339	0	4154	4117	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	142	142				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Adj. Flow (vph)	114	650	0	1031	812	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	439	325	0	1031	812	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	18.1	18.1		47.9	47.9	
Actuated g/C Ratio	0.23	0.23		0.60	0.60	
v/c Ratio	0.59	0.79		0.41	0.33	
Control Delay (s/veh)	20.6	29.3		10.3	9.6	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.6	29.3		10.3	9.6	
LOS	C	C		B	A	
Approach Delay (s/veh)	24.3			10.3	9.6	
Approach LOS	C			B	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 14.2		Intersection LOS: B	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	439	325	1031	812
v/c Ratio	0.59	0.79	0.41	0.33
Control Delay (s/veh)	20.6	29.3	10.3	9.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.6	29.3	10.3	9.6
Queue Length 50th (m)	25.4	31.6	33.5	24.8
Queue Length 95th (m)	35.5	56.8	60.2	45.7
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	967	511	2523	2501
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.45	0.64	0.41	0.32

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	650	0	1031	812	0
Future Volume (vph)	114	650	0	1031	812	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.89	0.85		1.00	1.00	
Flt Protected	0.99	1.00		1.00	1.00	
Satd. Flow (prot)	2821	1339		4154	4117	
Flt Permitted	0.99	1.00		1.00	1.00	
Satd. Flow (perm)	2821	1339		4154	4117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	650	0	1031	812	0
RTOR Reduction (vph)	110	110	0	0	0	0
Lane Group Flow (vph)	329	215	0	1031	812	0
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	18.1	18.1		47.9	47.9	
Effective Green, g (s)	18.1	18.1		47.9	47.9	
Actuated g/C Ratio	0.23	0.23		0.60	0.60	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	638	302		2487	2465	
v/s Ratio Prot	0.12			c0.25	0.20	
v/s Ratio Perm		c0.16				
v/c Ratio	0.52	0.71		0.41	0.33	
Uniform Delay, d1	27.1	28.5		8.6	8.0	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	7.7		0.5	0.4	
Delay (s)	27.8	36.3		9.1	8.4	
Level of Service	C	D		A	A	
Approach Delay (s/veh)	31.4			9.1	8.4	
Approach LOS	C			A	A	

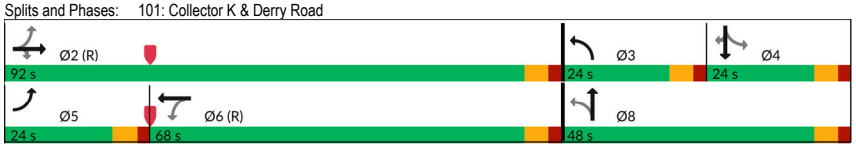
Intersection Summary				
HCM 2000 Control Delay (s/veh)	15.4	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	55.2%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

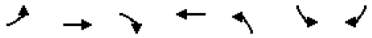
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	2474	26	0	801	11	146	0	0	41	0	28
Future Volume (vph)	44	2474	26	0	801	11	146	0	0	41	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		0.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.998							0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1883	4511	0	1789	1883	0	1789	1883	1601
Flt Permitted	0.216						0.591			0.757		
Satd. Flow (perm)	407	4520	1601	1883	4511	0	1113	1883	0	1426	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70		2							335
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	2689	28	0	871	12	159	0	0	45	0	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	2689	28	0	883	0	159	0	0	45	0	30
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt			Perm		Perm
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6		3	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0		10.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	24.0	92.0	92.0	68.0	68.0		24.0	48.0		24.0	24.0	24.0
Total Split (%)	17.1%	65.7%	65.7%	48.6%	48.6%		17.1%	34.3%		17.1%	17.1%	17.1%
Maximum Green (s)	18.0	86.0	86.0	62.0	62.0		18.0	42.0		18.0	18.0	18.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag		Lead			Lag	Lag	Lag
Lead-Lag Optimize?	Yes			Yes	Yes		Yes			Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	None		Max	Max	Max
Walk Time (s)		7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	0
Act Effct Green (s)	86.0	86.0	86.0		75.4		42.0			21.4		21.4
Actuated g/C Ratio	0.61	0.61	0.61		0.54		0.30			0.15		0.15
v/c Ratio	0.15	0.97	0.03		0.36		0.39			0.21		0.06
Control Delay (s/veh)	11.8	37.1	0.0		16.2		41.0			56.6		0.2
Queue Delay	0.0	0.0	0.0		0.0		0.0			0.0		0.0
Total Delay (s/veh)	11.8	37.1	0.0		16.2		41.0			56.6		0.2
LOS	B	D	A		B		D			E		A
Approach Delay (s/veh)		36.3			16.2			41.0			34.0	
Approach LOS		D			B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 31.9		Intersection LOS: C	
Intersection Capacity Utilization 72.6%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

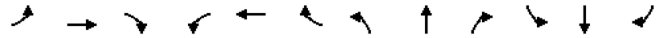
Splits and Phases: 101: Collector K & Derry Road





Lane Group	EBL	EBT	EBR	WBT	NBL	SBL	SBR
Lane Group Flow (vph)	48	2689	28	883	159	45	30
v/c Ratio	0.15	0.97	0.03	0.36	0.39	0.21	0.06
Control Delay (s/veh)	11.8	37.1	0.0	16.2	41.0	56.6	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.8	37.1	0.0	16.2	41.0	56.6	0.2
Queue Length 50th (m)	5.1	285.1	0.0	33.6	34.4	11.3	0.0
Queue Length 95th (m)	10.3	#329.2	0.0	46.2	54.2	24.2	0.0
Internal Link Dist (m)		1030.4		235.0			
Turn Bay Length (m)	100.0		50.0		100.0	30.0	30.0
Base Capacity (vph)	427	2776	1010	2429	420	217	528
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.97	0.03	0.36	0.38	0.21	0.06

Intersection Summary
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	2474	26	0	801	11	146	0	0	41	0	28
Future Volume (vph)	44	2474	26	0	801	11	146	0	0	41	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0			6.0		6.0
Lane Util. Factor	1.00	*0.80	1.00		*0.80		1.00			1.00		1.00
Frt	1.00	1.00	0.85		1.00		1.00			1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00		0.95			0.95		1.00
Satd. Flow (prot)	1789	4520	1601		4511		1789			1789		1601
Flt Permitted	0.22	1.00	1.00		1.00		0.59			0.76		1.00
Satd. Flow (perm)	406	4520	1601		4511		1114			1426		1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	2689	28	0	871	12	159	0	0	45	0	30
RTOR Reduction (vph)	0	0	11	0	1	0	0	0	0	0	0	25
Lane Group Flow (vph)	48	2689	17	0	882	0	159	0	0	45	0	5
Turn Type	pm+pt	NA	Perm	Perm	NA		pm+pt			Perm		Perm
Protected Phases	5	2			6		3	8			4	
Permitted Phases	2		2	6			8			4		4
Actuated Green, G (s)	86.0	86.0	86.0		74.2		42.0			21.4		21.4
Effective Green, g (s)	86.0	86.0	86.0		74.2		42.0			21.4		21.4
Actuated g/C Ratio	0.61	0.61	0.61		0.53		0.30			0.15		0.15
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0			6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0			3.0		3.0
Lane Grp Cap (vph)	306	2776	983		2390		404			217		244
v/s Ratio Prot	0.01	c0.59			0.20		c0.04					
v/s Ratio Perm	0.09		0.01				c0.08			0.03		0.00
v/c Ratio	0.16	0.97	0.02		0.37		0.39			0.21		0.02
Uniform Delay, d1	11.8	25.7	10.5		19.2		37.8			51.9		50.4
Progression Factor	1.00	1.00	1.00		0.82		1.00			1.00		1.00
Incremental Delay, d2	0.2	11.2	0.0		0.4		0.6			2.2		0.1
Delay (s)	12.1	36.9	10.6		16.2		38.4			54.0		50.5
Level of Service	B	D	B		B		D			D		D
Approach Delay (s/veh)		36.2			16.2			38.4			52.6	
Approach LOS		D			B			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	32.1	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.86				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		24.0	
Intersection Capacity Utilization	72.6%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1797	44	0	957	5	0	0	21	0	0	52
Future Volume (vph)	0	1797	44	0	957	5	0	0	21	0	0	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1953	48	0	1040	5	0	0	23	0	0	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1953	48	0	1045	0	0	0	23	0	0	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1797	44	0	957	5	0	0	21	0	0	52
Future Volume (Veh/h)	0	1797	44	0	957	5	0	0	21	0	0	52
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1953	48	0	1040	5	0	0	23	0	0	57
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.96			0.71			0.73	0.73	0.71	0.73	0.73	0.96
vC, conflicting volume	1045			2001			2357	2998	651	1717	3044	349
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	916			980			1222	2104	0	343	2166	195
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	97	100	100	93
cM capacity (veh/h)	713			497			91	37	770	415	34	785

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	651	651	651	48	416	416	213	23	57
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	48	0	0	5	23	57
cSH	1700	1700	1700	1700	1700	1700	1700	770	785
Volume to Capacity	0.38	0.38	0.38	0.03	0.24	0.24	0.13	0.03	0.07
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.8
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8	9.9
Lane LOS								A	A
Approach Delay (s/veh)	0.0				0.0			9.8	9.9
Approach LOS								A	A

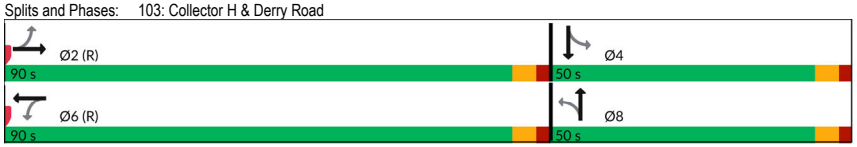
Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1707	51	14	935	14	207	0	18	13	2	25
Future Volume (vph)	90	1707	51	14	935	14	207	0	18	13	2	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.998			0.989			0.915	
Flt Protected	0.950			0.950				0.956			0.984	
Satd. Flow (prot)	1789	4502	0	1789	4511	0	0	1781	0	0	1696	0
Flt Permitted	0.213			0.057				0.712			0.900	
Satd. Flow (perm)	401	4502	0	107	4511	0	0	1326	0	0	1551	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			2			23			27	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1855	55	15	1016	15	225	0	20	14	2	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	1910	0	15	1031	0	0	245	0	0	43	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	90.0	90.0		90.0	90.0		50.0	50.0		50.0	50.0	
Total Split (%)	64.3%	64.3%		64.3%	64.3%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	84.0	84.0		84.0	84.0		44.0	44.0		44.0	44.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	98.7	98.7		98.7	98.7			29.3			29.3	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
v/c Ratio	0.35	0.60		0.20	0.32			0.83			0.12	
Control Delay (s/veh)	16.3	20.2		12.5	5.7			69.6			19.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	16.3	20.2		12.5	5.7			69.6			19.1	
LOS	B	C		B	A			E			B	
Approach Delay (s/veh)		20.0			5.8			69.6			19.1	
Approach LOS		C			A			E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 19.2		Intersection LOS: B	
Intersection Capacity Utilization 85.0%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	98	1910	15	1031	245	43
v/c Ratio	0.35	0.60	0.20	0.32	0.83	0.12
Control Delay (s/veh)	16.3	20.2	12.5	5.7	69.6	19.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.3	20.2	12.5	5.7	69.6	19.1
Queue Length 50th (m)	15.7	143.1	0.9	27.8	60.7	3.9
Queue Length 95th (m)	m9.4	68.3	m3.2	38.3	84.9	m11.5
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	282	3175	75	3180	432	505
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.60	0.20	0.32	0.57	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1707	51	14	935	14	207	0	18	13	2	25
Future Volume (vph)	90	1707	51	14	935	14	207	0	18	13	2	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.99			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1789	4501		1789	4510			1781			1696	
Flt Permitted	0.21	1.00		0.06	1.00			0.71			0.90	
Satd. Flow (perm)	401	4501		108	4510			1327			1551	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1855	55	15	1016	15	225	0	20	14	2	27
RTOR Reduction (vph)	0	1	0	0	1	0	0	18	0	0	21	0
Lane Group Flow (vph)	98	1909	0	15	1030	0	0	227	0	0	22	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	98.7	98.7		98.7	98.7			29.3			29.3	
Effective Green, g (s)	98.7	98.7		98.7	98.7			29.3			29.3	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	282	3173		76	3179			277			324	
v/s Ratio Prot		c0.42			0.23							
v/s Ratio Perm	0.24			0.14				c0.17			0.01	
v/c Ratio	0.35	0.60		0.20	0.32			0.82			0.07	
Uniform Delay, d1	8.1	10.6		7.1	7.9			52.8			44.4	
Progression Factor	1.29	1.68		0.60	0.62			1.00			0.93	
Incremental Delay, d2	2.3	0.6		5.3	0.3			16.9			0.1	
Delay (s)	12.7	18.4		9.6	5.2			69.7			41.4	
Level of Service	B	B		A	A			E			D	
Approach Delay (s/veh)		18.1			5.2			69.7			41.4	
Approach LOS		B			A			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

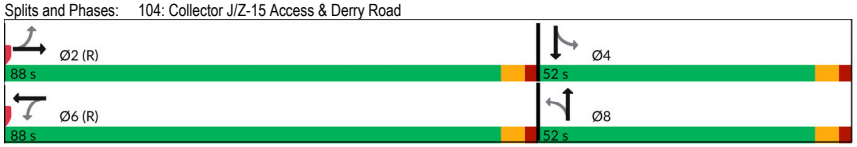
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	1638	67	8	925	22	271	0	24	5	0	24
Future Volume (vph)	82	1638	67	8	925	22	271	0	24	5	0	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.994			0.997			0.989			0.887	
Flt Protected	0.950			0.950				0.956			0.992	
Satd. Flow (prot)	1789	4493	0	1789	4507	0	0	1781	0	0	1657	0
Flt Permitted	0.206			0.056				0.721			0.945	
Satd. Flow (perm)	388	4493	0	105	4507	0	0	1343	0	0	1579	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			4			23			26	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	1780	73	9	1005	24	295	0	26	5	0	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	1853	0	9	1029	0	0	321	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	88.0	88.0		88.0	88.0		52.0	52.0		52.0	52.0	
Total Split (%)	62.9%	62.9%		62.9%	62.9%		37.1%	37.1%		37.1%	37.1%	
Maximum Green (s)	82.0	82.0		82.0	82.0		46.0	46.0		46.0	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	91.2	91.2		91.2	91.2			36.8			36.8	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
v/c Ratio	0.35	0.63		0.13	0.35			0.87			0.07	
Control Delay (s/veh)	14.7	14.0		17.1	11.0			67.7			13.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	14.7	14.0		17.1	11.0			67.7			13.8	
LOS	B	B		B	B			E			B	
Approach Delay (s/veh)		14.0			11.1			67.7			13.8	
Approach LOS		B			B			E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 18.3		Intersection LOS: B	
Intersection Capacity Utilization 87.9%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	89	1853	9	1029	321	31
v/c Ratio	0.35	0.63	0.13	0.35	0.87	0.07
Control Delay (s/veh)	14.7	14.0	17.1	11.0	67.7	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.7	14.0	17.1	11.0	67.7	13.8
Queue Length 50th (m)	7.8	198.5	0.8	46.8	80.9	1.1
Queue Length 95th (m)	m9.3	107.0	4.0	60.2	107.4	8.2
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	253	2940	68	2948	460	540
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.63	0.13	0.35	0.70	0.06

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	1638	67	8	925	22	271	0	24	5	0	24
Future Volume (vph)	82	1638	67	8	925	22	271	0	24	5	0	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.99			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4494		1789	4504			1781			1657	
Flt Permitted	0.21	1.00		0.06	1.00			0.72			0.94	
Satd. Flow (perm)	389	4494		105	4504			1343			1578	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	1780	73	9	1005	24	295	0	26	5	0	26
RTOR Reduction (vph)	0	2	0	0	1	0	0	17	0	0	19	0
Lane Group Flow (vph)	89	1851	0	9	1028	0	0	304	0	0	12	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	91.2	91.2		91.2	91.2			36.8			36.8	
Effective Green, g (s)	91.2	91.2		91.2	91.2			36.8			36.8	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	253	2927		68	2934			353			414	
v/s Ratio Prot		c0.41			0.23							
v/s Ratio Perm	0.23			0.09				c0.23			0.01	
v/c Ratio	0.35	0.63		0.13	0.35			0.86			0.03	
Uniform Delay, d1	11.0	14.5		9.3	11.0			49.2			38.3	
Progression Factor	0.79	0.83		0.91	0.89			1.00			1.00	
Incremental Delay, d2	3.1	0.9		3.9	0.3			18.9			0.0	
Delay (s)	11.9	12.9		12.4	10.2			68.0			38.4	
Level of Service	B	B		B	B			E			D	
Approach Delay (s/veh)		12.8			10.2			68.0			38.4	
Approach LOS		B			B			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	17.6	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.70				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	87.9%	ICU Level of Service		E	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↱		↱
Traffic Volume (vph)	0	2515	758	13	0	54
Future Volume (vph)	0	2515	758	13	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	*0.80	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	5142	3014	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	5142	3014	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2734	824	14	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	2734	824	14	0	59
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.9%		ICU Level of Service A	
Analysis Period (min) 15			
* User Entered Value			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↱		↱
Traffic Volume (veh/h)	0	2515	758	13	0	54
Future Volume (Veh/h)	0	2515	758	13	0	54
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2734	824	14	0	59
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.89				0.47	0.89
vC, conflicting volume	838				1735	412
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	564				0	84
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	93
cM capacity (veh/h)	891				483	851

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	911	911	911	412	412	14	59
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	14	59
cSH	1700	1700	1700	1700	1700	1700	851
Volume to Capacity	0.54	0.54	0.54	0.24	0.24	0.00*	0.07
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	9.5
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			9.5
Approach LOS							A

Intersection Summary				
Average Delay		0.2		
Intersection Capacity Utilization		51.9%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

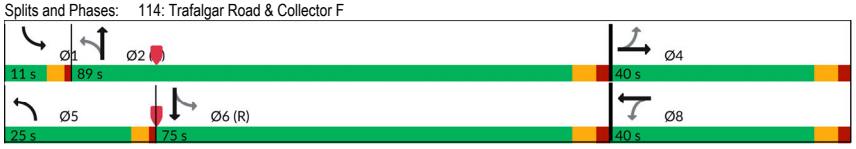
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	55	66	67	64	79	41	1870	92	61	1203	33
Future Volume (vph)	62	55	66	67	64	79	41	1870	92	61	1203	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.918			0.917			0.993			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1653	0	1652	1651	0	1711	4390	0	1711	4403	0
Flt Permitted	0.413			0.507			0.143			0.040		
Satd. Flow (perm)	718	1653	0	881	1651	0	257	4390	0	72	4403	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		41			42			8			3	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	60	72	73	70	86	45	2033	100	66	1308	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	67	132	0	73	156	0	45	2133	0	66	1344	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	15.6	15.6		15.6	15.6		109.7	102.1		112.7	103.5	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.78	0.73		0.81	0.74	
v/c Ratio	0.84	0.60		0.74	0.71		0.16	0.67		0.42	0.41	
Control Delay (s/veh)	123.9	51.1		99.6	60.1		2.0	8.4		34.1	4.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	123.9	51.1		99.6	60.1		2.0	8.4		34.1	4.6	
LOS	F	D		F	E		A	A		C	A	
Approach Delay (s/veh)		75.6			72.7			8.3			6.0	
Approach LOS		E			E			A			A	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay (s/veh): 14.5		Intersection LOS: B
Intersection Capacity Utilization 79.0%		ICU Level of Service D
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	67	132	73	156	45	2133	66	1344
v/c Ratio	0.84	0.60	0.74	0.71	0.16	0.67	0.42	0.41
Control Delay (s/veh)	123.9	51.1	99.6	60.1	2.0	8.4	34.1	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	123.9	51.1	99.6	60.1	2.0	8.4	34.1	4.6
Queue Length 50th (m)	18.8	24.5	20.3	31.5	0.1	2.0	4.5	10.3
Queue Length 95th (m)	#38.0	44.3	36.6	53.0	m2.7	m268.3	20.4	69.3
Internal Link Dist (m)		200.2		176.3		308.8		241.5
Turn Bay Length (m)	60.0		50.0		50.0		70.0	
Base Capacity (vph)	174	432	213	432	427	3202	157	3257
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.31	0.34	0.36	0.11	0.67	0.42	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	55	66	67	64	79	41	1870	92	61	1203	33
Future Volume (vph)	62	55	66	67	64	79	41	1870	92	61	1203	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.92		1.00	0.92		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1653		1652	1652		1711	4390		1711	4403	
Flt Permitted	0.41	1.00		0.51	1.00		0.14	1.00		0.04	1.00	
Satd. Flow (perm)	718	1653		881	1652		257	4390		72	4403	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	67	60	72	73	70	86	45	2033	100	66	1308	36
RTOR Reduction (vph)	0	36	0	0	37	0	0	2	0	0	1	0
Lane Group Flow (vph)	67	96	0	73	119	0	45	2131	0	66	1343	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	15.6	15.6		15.6	15.6		106.9	101.3		109.9	102.8	
Effective Green, g (s)	15.6	15.6		15.6	15.6		106.9	101.3		109.9	102.8	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.76	0.72		0.79	0.73	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	80	184		98	184		254	3176		139	3233	
v/s Ratio Prot		0.06			0.07		0.01	c0.49		c0.02	0.31	
v/s Ratio Perm	c0.09			0.08			0.13			0.35		
v/c Ratio	0.84	0.52		0.74	0.65		0.18	0.67		0.47	0.42	
Uniform Delay, d1	61.0	58.7		60.3	59.5		4.4	10.4		13.7	7.1	
Progression Factor	1.00	1.00		1.00	1.00		0.48	0.69		1.79	0.55	
Incremental Delay, d2	50.1	2.5		26.1	7.5		0.1	0.4		2.4	0.4	
Delay (s)	111.1	61.2		86.3	67.1		2.2	7.6		26.9	4.3	
Level of Service	F	E		F	E		A	A		C	A	
Approach Delay (s/veh)		78.0			73.2			7.5			5.4	
Approach LOS		E			E			A			A	

Intersection Summary

HCM 2000 Control Delay (s/veh)	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

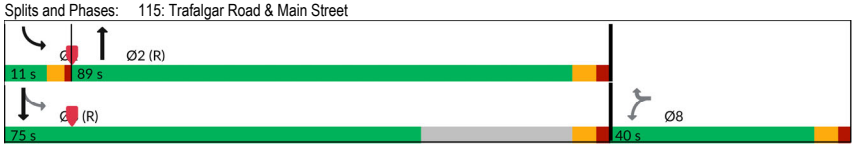
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	12	1777	112	38	1231
Future Volume (vph)	40	12	1777	112	38	1231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	90.0	0.0		0.0	50.0	
Storage Lanes	0	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.991			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4381	0	1711	4421
Flt Permitted	0.950				0.064	
Satd. Flow (perm)	1789	1601	4381	0	115	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		12	10			
Link Speed (k/h)	48		60			60
Link Distance (m)	627.0		712.8			236.3
Travel Time (s)	47.0		42.8			14.2
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	40	12	1795	113	38	1243
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	12	1908	0	38	1243
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	8	8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		7.0	20.0
Minimum Split (s)	40.0	40.0	26.0		11.0	26.0
Total Split (s)	40.0	40.0	89.0		11.0	75.0
Total Split (%)	28.6%	28.6%	63.6%		7.9%	53.6%
Maximum Green (s)	34.0	34.0	83.0		7.0	69.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Don't Walk (s)	27.0	27.0	11.0			11.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	10.3	10.3	112.9		122.9	122.1
Actuated g/C Ratio	0.07	0.07	0.81		0.88	0.87
v/c Ratio	0.31	0.09	0.54		0.21	0.32
Control Delay (s/veh)	67.6	28.4	13.7		5.3	2.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	67.6	28.4	13.7		5.3	2.4
LOS	E	C	B		A	A
Approach Delay (s/veh)	58.6		13.7			2.5
Approach LOS	E		B			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay (s/veh): 10.0		Intersection LOS: A	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	40	12	1908	38	1243
v/c Ratio	0.31	0.09	0.54	0.21	0.32
Control Delay (s/veh)	67.6	28.4	13.7	5.3	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	67.6	28.4	13.7	5.3	2.4
Queue Length 50th (m)	10.9	0.0	130.0	1.2	24.8
Queue Length 95th (m)	23.1	6.7	173.5	2.8	31.9
Internal Link Dist (m)	603.0		688.8		212.3
Turn Bay Length (m)	90.0			50.0	
Base Capacity (vph)	434	397	3536	184	3854
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.09	0.03	0.54	0.21	0.32

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	12	1777	112	38	1231
Future Volume (vph)	40	12	1777	112	38	1231
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4382		1711	4421
Flt Permitted	0.95	1.00	1.00		0.06	1.00
Satd. Flow (perm)	1789	1601	4382		114	4421
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	40	12	1795	113	38	1243
RTOR Reduction (vph)	0	11	2	0	0	0
Lane Group Flow (vph)	40	1	1906	0	38	1243
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8			6	
Actuated Green, G (s)	8.3	8.3	109.8		119.7	119.7
Effective Green, g (s)	8.3	8.3	109.8		119.7	119.7
Actuated g/C Ratio	0.06	0.06	0.78		0.86	0.86
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	106	94	3436		164	3779
v/s Ratio Prot			c0.43		0.01	c0.28
v/s Ratio Perm	c0.02	0.00			0.19	
v/c Ratio	0.38	0.01	0.55		0.23	0.33
Uniform Delay, d1	63.4	62.0	5.8		3.8	2.0
Progression Factor	1.00	1.00	2.12		1.85	1.00
Incremental Delay, d2	2.2	0.0	0.4		0.7	0.2
Delay (s)	65.6	62.0	12.6		7.8	2.3
Level of Service	E	E	B		A	A
Approach Delay (s/veh)	64.8		12.6			2.4
Approach LOS	E		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

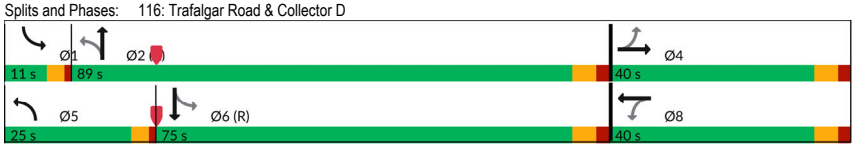
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	13	141	45	7	61	67	1834	120	148	1097	58
Future Volume (vph)	121	13	141	45	7	61	67	1834	120	148	1097	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		0.0	100.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.863			0.866			0.991			0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1554	0	1652	1559	0	1711	4381	0	1711	4386	0
Flt Permitted	0.709			0.451			0.175			0.045		
Satd. Flow (perm)	1233	1554	0	784	1559	0	315	4381	0	81	4386	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		153			66			11			7	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	132	14	153	49	8	66	73	1993	130	161	1192	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	132	167	0	49	74	0	73	2123	0	161	1255	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	20.3	20.3		20.3	20.3		94.2	84.8		109.7	98.5	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.67	0.61		0.78	0.70	
v/c Ratio	0.74	0.47		0.43	0.26		0.26	0.80		0.57	0.41	
Control Delay (s/veh)	80.3	13.7		64.3	15.5		3.2	10.5		44.3	8.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.2		0.0	0.0	
Total Delay (s/veh)	80.3	13.7		64.3	15.5		3.2	10.7		44.3	8.8	
LOS	F	B		E	B		A	B		D	A	
Approach Delay (s/veh)		43.1			34.9			10.4			12.9	
Approach LOS		D			C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 14.5		Intersection LOS: B	
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	132	167	49	74	73	2123	161	1255
v/c Ratio	0.74	0.47	0.43	0.26	0.26	0.80	0.57	0.41
Control Delay (s/veh)	80.3	13.7	64.3	15.5	3.2	10.5	44.3	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	80.3	13.7	64.3	15.5	3.2	10.7	44.3	8.8
Queue Length 50th (m)	36.1	3.5	12.7	2.0	0.0	134.0	30.2	37.8
Queue Length 95th (m)	55.5	23.2	24.7	15.3	m1.0	71.6	#64.7	89.8
Internal Link Dist (m)		84.9		331.4		200.5		688.8
Turn Bay Length (m)	50.0		80.0		50.0		100.0	
Base Capacity (vph)	299	493	190	428	450	2667	283	3087
Starvation Cap Reductn	0	0	0	0	0	103	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.34	0.26	0.17	0.16	0.83	0.57	0.41

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	13	141	45	7	61	67	1834	120	148	1097	58
Future Volume (vph)	121	13	141	45	7	61	67	1834	120	148	1097	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.86		1.00	0.87		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1553		1652	1560		1711	4380		1711	4388	
Flt Permitted	0.71	1.00		0.45	1.00		0.18	1.00		0.05	1.00	
Satd. Flow (perm)	1232	1553		784	1560		315	4380		81	4388	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	132	14	153	49	8	66	73	1993	130	161	1192	63
RTOR Reduction (vph)	0	131	0	0	56	0	0	4	0	0	2	0
Lane Group Flow (vph)	132	36	0	49	18	0	73	2119	0	161	1253	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.3	20.3		20.3	20.3		90.8	84.8		107.7	97.7	
Effective Green, g (s)	20.3	20.3		20.3	20.3		90.8	84.8		107.7	97.7	
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.65	0.61		0.77	0.70	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	178	225		113	226		264	2653		282	3062	
v/s Ratio Prot		0.02			0.01		0.01	c0.48		c0.08	0.29	
v/s Ratio Perm	c0.11			0.06			0.17			0.36		
v/c Ratio	0.74	0.16		0.43	0.08		0.28	0.80		0.57	0.41	
Uniform Delay, d1	57.3	52.4		54.6	51.8		9.0	21.1		38.2	8.9	
Progression Factor	1.00	1.00		1.00	1.00		0.28	0.39		1.18	0.87	
Incremental Delay, d2	15.3	0.3		2.7	0.1		0.5	2.1		2.7	0.4	
Delay (s)	72.6	52.7		57.3	51.9		3.0	10.2		47.7	8.1	
Level of Service	E	D		E	D		A	B		D	A	
Approach Delay (s/veh)		61.5			54.0			10.0			12.6	
Approach LOS		E			D			A			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	16.1	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.75				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	82.4%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

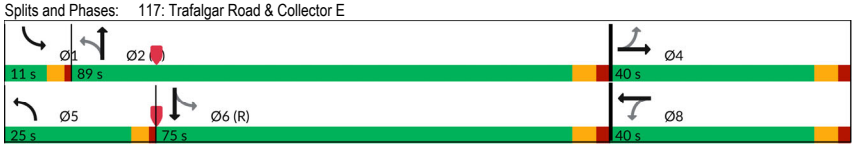
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	3	15	44	4	36	8	1961	42	42	1238	3
Future Volume (vph)	24	3	15	44	4	36	8	1961	42	42	1238	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.874			0.864			0.997				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1646	0	1789	1627	0	1711	4408	0	1711	4421	0
Flt Permitted	0.729			0.745			0.155			0.041		
Satd. Flow (perm)	1373	1646	0	1403	1627	0	279	4408	0	74	4421	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			39			3				
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	3	16	48	4	39	9	2132	46	46	1346	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	19	0	48	43	0	9	2178	0	46	1349	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	11.3	11.3		11.3	11.3		117.7	111.7		121.6	119.0	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.84	0.80		0.87	0.85	
v/c Ratio	0.23	0.13		0.42	0.26		0.03	0.62		0.30	0.36	
Control Delay (s/veh)	64.8	29.1		72.5	23.4		1.8	4.0		22.1	3.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	64.8	29.1		72.5	23.4		1.8	4.0		22.1	3.7	
LOS	E	C		E	C		A	A		C	A	
Approach Delay (s/veh)		49.7			49.3			4.0			4.3	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay (s/veh): 5.8		Intersection LOS: A	
Intersection Capacity Utilization 57.9%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	26	19	48	43	9	2178	46	1349
v/c Ratio	0.23	0.13	0.42	0.26	0.03	0.62	0.30	0.36
Control Delay (s/veh)	64.8	29.1	72.5	23.4	1.8	4.0	22.1	3.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.8	29.1	72.5	23.4	1.8	4.0	22.1	3.7
Queue Length 50th (m)	7.1	0.8	13.1	1.1	0.2	43.2	2.3	42.3
Queue Length 95th (m)	16.6	8.9	m25.9	m12.9	m0.5	57.1	14.5	42.3
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	333	411	340	424	457	3517	152	3756
Starvation Cap Reductn	0	0	0	0	0	44	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.05	0.14	0.10	0.02	0.63	0.30	0.36

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	3	15	44	4	36	8	1961	42	42	1238	3
Future Volume (vph)	24	3	15	44	4	36	8	1961	42	42	1238	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.87		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1646		1789	1627		1711	4407		1711	4419	
Flt Permitted	0.73	1.00		0.75	1.00		0.15	1.00		0.04	1.00	
Satd. Flow (perm)	1373	1646		1403	1627		278	4407		74	4419	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	3	16	48	4	39	9	2132	46	46	1346	3
RTOR Reduction (vph)	0	15	0	0	36	0	0	1	0	0	0	0
Lane Group Flow (vph)	26	4	0	48	7	0	9	2177	0	46	1349	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.3	9.3		9.3	9.3		109.8	108.5		118.7	113.4	
Effective Green, g (s)	9.3	9.3		9.3	9.3		109.8	108.5		118.7	113.4	
Actuated g/C Ratio	0.07	0.07		0.07	0.07		0.78	0.78		0.85	0.81	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	91	109		93	108		231	3415		135	3579	
v/s Ratio Prot		0.00			0.00		0.00	c0.49		c0.02	0.31	
v/s Ratio Perm	0.02			c0.03			0.03			0.27		
v/c Ratio	0.29	0.04		0.52	0.06		0.04	0.64		0.34	0.38	
Uniform Delay, d1	62.2	61.2		63.2	61.3		3.3	7.0		7.6	3.6	
Progression Factor	1.00	1.00		1.00	1.01		0.79	0.43		2.66	1.03	
Incremental Delay, d2	1.7	0.1		4.8	0.2		0.1	0.7		1.4	0.3	
Delay (s)	63.9	61.3		68.2	62.1		2.6	3.7		21.6	4.0	
Level of Service	E	E		E	E		A	A		C	A	
Approach Delay (s/veh)		62.8			65.3			3.7			4.6	
Approach LOS		E			E			A			A	

Intersection Summary						
HCM 2000 Control Delay (s/veh)	6.3	HCM 2000 Level of Service	A			
HCM 2000 Volume to Capacity ratio	0.61					
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B			
Analysis Period (min)	15					

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	113	37	13	0	0	39
Future Volume (vph)	113	37	13	0	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.964				
Satd. Flow (prot)	0	3450	3579	0	1629	0
Flt Permitted		0.964				
Satd. Flow (perm)	0	3450	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	113	37	13	0	0	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	150	13	0	39	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	113	37	13	0	0	39
Future Volume (Veh/h)	113	37	13	0	0	39
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	113	37	13	0	0	39
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	13				258	7
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	13				258	7
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				100	96
cM capacity (veh/h)	1604				659	1074

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	125	25	9	4	39
Volume Left	113	0	0	0	0
Volume Right	0	0	0	0	39
cSH	1604	1700	1700	1700	1074
Volume to Capacity	0.07	0.01	0.00*	0.00*	0.04
Queue Length 95th (m)	1.7	0.0	0.0	0.0	0.9
Control Delay (s/veh)	6.7	0.0	0.0	0.0	8.5
Lane LOS	A				A
Approach Delay (s/veh)	5.6		0.0		8.5
Approach LOS					A

Intersection Summary				
Average Delay		5.8		
Intersection Capacity Utilization		22.9%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	37	0	0	0	0	13
Future Volume (vph)	37	0	0	0	0	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			39.5	161.7	
Travel Time (s)	55.9			3.0	12.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	0	0	0	0	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	40	0	0	0	0	14
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	37	0	0	0	0	13
Future Volume (vph)	37	0	0	0	0	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	0	0	0	0	14

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	40	0	14
Volume Left (vph)	40	0	0
Volume Right (vph)	0	0	14
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	5.1	4.5	3.4
Degree Utilization, x	0.06	0.00	0.01
Capacity (veh/h)	705	800	1030
Control Delay (s/veh)	7.2	6.3	6.5
Approach Delay (s/veh)	7.2		6.5
Approach LOS	A		A

Intersection Summary			
Delay	7.0		
Level of Service	A		
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	6	18	0	0	0
Future Volume (vph)	0	6	18	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	20	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	20	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	6	18	0	0	0
Future Volume (Veh/h)	0	6	18	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	20	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	40	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	40	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	99			
cM capacity (veh/h)	960	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	7	20	0
Volume Left	0	20	0
Volume Right	7	0	0
cSH	1085	1623	1700
Volume to Capacity	0.00*	0.01	0.00
Queue Length 95th (m)	0.1	0.3	0.0
Control Delay (s/veh)	8.3	7.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.3	7.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

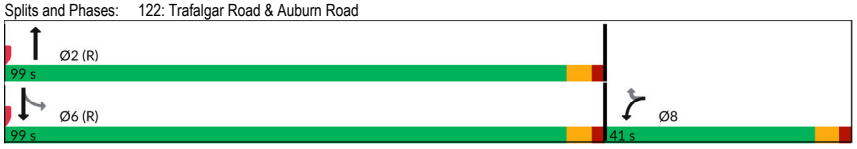
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	13	39	1734	75	83	1320
Future Volume (vph)	13	39	1734	75	83	1320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.994			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4394	0	1711	4421
Flt Permitted	0.950				0.083	
Satd. Flow (perm)	1789	1601	4394	0	149	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		32	8			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	39	1734	75	83	1320
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	39	1809	0	83	1320
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		20.0	20.0
Minimum Split (s)	40.0	40.0	40.0		40.0	40.0
Total Split (s)	41.0	41.0	99.0		99.0	99.0
Total Split (%)	29.3%	29.3%	70.7%		70.7%	70.7%
Maximum Green (s)	35.0	35.0	93.0		93.0	93.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Don't Walk (s)	9.0	9.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	10.0	10.0	122.4		122.4	122.4
Actuated g/C Ratio	0.07	0.07	0.87		0.87	0.87
v/c Ratio	0.10	0.27	0.47		0.64	0.34
Control Delay (s/veh)	62.8	29.4	8.8		30.1	2.3
Queue Delay	0.0	0.0	0.2		0.0	0.0
Total Delay (s/veh)	62.8	29.4	9.1		30.1	2.3
LOS	E	C	A		C	A
Approach Delay (s/veh)	37.7		9.1			4.0
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 7.3		Intersection LOS: A	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	13	39	1809	83	1320
v/c Ratio	0.10	0.27	0.47	0.64	0.34
Control Delay (s/veh)	62.8	29.4	8.8	30.1	2.3
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	62.8	29.4	9.1	30.1	2.3
Queue Length 50th (m)	3.5	1.9	119.3	6.5	26.9
Queue Length 95th (m)	10.6	13.7	171.7	#46.8	31.2
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	447	424	3842	130	3865
Starvation Cap Reductn	0	0	997	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.03	0.09	0.64	0.64	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	13	39	1734	75	83	1320
Future Volume (vph)	13	39	1734	75	83	1320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4393		1711	4421
Flt Permitted	0.95	1.00	1.00		0.08	1.00
Satd. Flow (perm)	1789	1601	4393		149	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	39	1734	75	83	1320
RTOR Reduction (vph)	0	30	1	0	0	0
Lane Group Flow (vph)	13	9	1808	0	83	1320
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases		8			6	
Actuated Green, G (s)	8.0	8.0	120.0		120.0	120.0
Effective Green, g (s)	8.0	8.0	120.0		120.0	120.0
Actuated g/C Ratio	0.06	0.06	0.86		0.86	0.86
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	102	91	3765		127	3789
v/s Ratio Prot	c0.01		0.41			0.30
v/s Ratio Perm		0.01			c0.56	
v/c Ratio	0.13	0.10	0.48		0.65	0.35
Uniform Delay, d1	62.7	62.6	2.4		3.2	2.0
Progression Factor	1.00	1.00	3.39		1.00	1.00
Incremental Delay, d2	0.6	0.5	0.4		23.3	0.3
Delay (s)	63.3	63.0	8.6		26.5	2.3
Level of Service	E	E	A		C	A
Approach Delay (s/veh)	63.1		8.6			3.7
Approach LOS	E		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	7	19	18	6	0
Future Volume (vph)	0	7	19	18	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.975		
Satd. Flow (prot)	1629	0	0	1836	1883	0
Flt Permitted				0.975		
Satd. Flow (perm)	1629	0	0	1836	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	7	19	18	6	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	37	6	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	7	19	18	6	0
Future Volume (Veh/h)	0	7	19	18	6	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	7	19	18	6	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	62	6	6			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	62	6	6			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	99			
cM capacity (veh/h)	933	1077	1615			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	7	37	6
Volume Left	0	19	0
Volume Right	7	0	0
cSH	1077	1615	1700
Volume to Capacity	0.00*	0.01	0.00*
Queue Length 95th (m)	0.1	0.3	0.0
Control Delay (s/veh)	8.4	3.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	3.8	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	18.7%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	46	30	30	57	36	60
Future Volume (vph)	46	30	30	57	36	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.946		0.912			
Flt Protected	0.971					0.982
Satd. Flow (prot)	1654	0	1642	0	0	1768
Flt Permitted	0.971					0.982
Satd. Flow (perm)	1654	0	1642	0	0	1768
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	33	33	62	39	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	83	0	95	0	0	104
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	46	30	30	57	36	60
Future Volume (Veh/h)	46	30	30	57	36	60
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	50	33	33	62	39	65
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	207	64			95	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	207	64			95	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	97			97	
cM capacity (veh/h)	761	1000			1499	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	83	95	104
Volume Left	50	0	39
Volume Right	33	62	0
cSH	841	1700	1499
Volume to Capacity	0.10	0.06	0.03
Queue Length 95th (m)	2.5	0.0	0.6
Control Delay (s/veh)	9.7	0.0	2.9
Lane LOS	A		A
Approach Delay (s/veh)	9.7	0.0	2.9
Approach LOS	A		

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	22.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	114	6	42	86	0	8	7	22	63	6	0
Future Volume (vph)	0	114	6	42	86	0	8	7	22	63	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993						0.921				
Flt Protected					0.984			0.989			0.957	
Satd. Flow (prot)	0	1870	0	0	1772	0	0	1716	0	0	1802	0
Flt Permitted					0.984			0.989			0.957	
Satd. Flow (perm)	0	1870	0	0	1772	0	0	1716	0	0	1802	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	124	7	46	93	0	9	8	24	68	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	131	0	0	139	0	0	41	0	0	75	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	114	6	42	86	0	8	7	22	63	6	0
Future Volume (Veh/h)	0	114	6	42	86	0	8	7	22	63	6	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	124	7	46	93	0	9	8	24	68	7	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	93			131			316	313	128	341	316	93
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	93			131			316	313	128	341	316	93
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			99	99	97	88	99	100
cM capacity (veh/h)	1501			1454			616	584	923	577	581	964

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	131	139	41	75
Volume Left	0	46	9	68
Volume Right	7	0	24	0
cSH	1501	1454	754	577
Volume to Capacity	0.00	0.03	0.05	0.13
Queue Length 95th (m)	0.0	0.7	1.3	3.4
Control Delay (s/veh)	0.0	2.7	10.0	12.2
Lane LOS		A	B	B
Approach Delay (s/veh)	0.0	2.7	10.0	12.2
Approach LOS			B	B

Intersection Summary				
Average Delay		4.4		
Intersection Capacity Utilization		30.7%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	153	35	7	66	25	27
Future Volume (vph)	153	35	7	66	25	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975				0.930	
Flt Protected				0.995	0.976	
Satd. Flow (prot)	1836	0	0	1874	1710	0
Flt Permitted				0.995	0.976	
Satd. Flow (perm)	1836	0	0	1874	1710	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	38	8	72	27	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	204	0	0	80	56	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	2	85	11	0	106
Future Volume (vph)	16	2	85	11	0	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.986		0.984			
Flt Protected	0.957					
Satd. Flow (prot)	1641	0	1772	0	0	1801
Flt Permitted	0.957					
Satd. Flow (perm)	1641	0	1772	0	0	1801
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	2	92	12	0	115
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	104	0	0	115
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	2	85	11	0	106
Future Volume (Veh/h)	16	2	85	11	0	106
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	2	92	12	0	115
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	213	98			104	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	213	98			104	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	100			100	
cM capacity (veh/h)	775	958			1488	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	19	104	115
Volume Left	17	0	0
Volume Right	2	12	0
cSH	791	1700	1488
Volume to Capacity	0.02	0.06	0.00
Queue Length 95th (m)	0.6	0.0	0.0
Control Delay (s/veh)	9.7	0.0	0.0
Lane LOS	A		
Approach Delay (s/veh)	9.7	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	15.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	29	5	4	14	4	0	33	0	1	53	0
Future Volume (vph)	0	29	5	4	14	4	0	33	0	1	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982			0.977							
Flt Protected					0.991						0.999	
Satd. Flow (prot)	0	1707	0	0	1683	0	0	1801	0	0	1799	0
Flt Permitted					0.991						0.999	
Satd. Flow (perm)	0	1707	0	0	1683	0	0	1801	0	0	1799	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	32	5	4	15	4	0	36	0	1	58	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	37	0	0	23	0	0	36	0	0	59	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	29	5	4	14	4	0	33	0	1	53	0
Future Volume (Veh/h)	0	29	5	4	14	4	0	33	0	1	53	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	32	5	4	15	4	0	36	0	1	58	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	108	96	58	117	96	36	58			36		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	108	96	58	117	96	36	58			36		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	96	100	100	98	100	100			100		
cM capacity (veh/h)	855	794	1008	828	794	1037	1546			1575		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	37	23	36	59
Volume Left	0	4	0	1
Volume Right	5	4	0	0
cSH	817	834	1546	1575
Volume to Capacity	0.05	0.03	0.00	0.00*
Queue Length 95th (m)	1.1	0.6	0.0	0.0
Control Delay (s/veh)	9.6	9.4	0.0	0.1
Lane LOS	A	A		A
Approach Delay (s/veh)	9.6	9.4	0.0	0.1
Approach LOS	A	A		

Intersection Summary				
Average Delay		3.7		
Intersection Capacity Utilization		14.8%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	49	10	0	11	0	25	62	20	0	44	1
Future Volume (vph)	2	49	10	0	11	0	25	62	20	0	44	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977						0.974			0.997	
Flt Protected		0.998						0.988				
Satd. Flow (prot)	0	1836	0	0	1883	0	0	1733	0	0	1795	0
Flt Permitted		0.998						0.988				
Satd. Flow (perm)	0	1836	0	0	1883	0	0	1733	0	0	1795	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	53	11	0	12	0	27	67	22	0	48	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	0	0	12	0	0	116	0	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.0%	ICU Level of Service A	
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	49	10	0	11	0	25	62	20	0	44	1
Future Volume (Veh/h)	2	49	10	0	11	0	25	62	20	0	44	1
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	53	11	0	12	0	27	67	22	0	48	1
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	187	192	49	218	181	78	49			89		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	187	192	49	218	181	78	49			89		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	92	99	100	98	100	98			100		
cM capacity (veh/h)	754	691	1020	678	701	983	1558			1506		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	66	12	116	49
Volume Left	2	0	27	0
Volume Right	11	0	22	1
cSH	732	701	1558	1506
Volume to Capacity	0.09	0.02	0.02	0.00
Queue Length 95th (m)	2.2	0.4	0.4	0.0
Control Delay (s/veh)	10.4	10.2	1.8	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	10.4	10.2	1.8	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay		4.2		
Intersection Capacity Utilization		24.0%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	113	15	9	119	2	17	27	12	1	42	79
Future Volume (vph)	67	113	15	9	119	2	17	27	12	1	42	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.998			0.971			0.913	
Flt Protected		0.983			0.996			0.985				
Satd. Flow (prot)	0	1692	0	0	1790	0	0	1722	0	0	1644	0
Flt Permitted		0.983			0.996			0.985				
Satd. Flow (perm)	0	1692	0	0	1790	0	0	1722	0	0	1644	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	123	16	10	129	2	18	29	13	1	46	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	212	0	0	141	0	0	60	0	0	133	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	113	15	9	119	2	17	27	12	1	42	79
Future Volume (Veh/h)	67	113	15	9	119	2	17	27	12	1	42	79
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	73	123	16	10	129	2	18	29	13	1	46	86
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	229	169	89	240	206	36	132			42		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	229	169	89	240	206	36	132			42		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	83	98	98	81	100	99			100		
cM capacity (veh/h)	613	714	969	604	682	1037	1453			1567		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	212	141	60	133
Volume Left	73	10	18	1
Volume Right	16	2	13	86
cSH	689	679	1453	1567
Volume to Capacity	0.31	0.21	0.01	0.00*
Queue Length 95th (m)	9.9	5.9	0.3	0.0
Control Delay (s/veh)	12.5	11.7	2.3	0.1
Lane LOS	B	B	A	A
Approach Delay (s/veh)	12.5	11.7	2.3	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay		8.2		
Intersection Capacity Utilization		41.2%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	132	0	13	106	16	1	9	3	10	41	11
Future Volume (vph)	9	132	0	13	106	16	1	9	3	10	41	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.984			0.971			0.976	
Flt Protected		0.997			0.995			0.996			0.992	
Satd. Flow (prot)	0	1795	0	0	1763	0	0	1741	0	0	1743	0
Flt Permitted		0.997			0.995			0.996			0.992	
Satd. Flow (perm)	0	1795	0	0	1763	0	0	1741	0	0	1743	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	143	0	14	115	17	1	10	3	11	45	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	153	0	0	146	0	0	14	0	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	132	0	13	106	16	1	9	3	10	41	11
Future Volume (Veh/h)	9	132	0	13	106	16	1	9	3	10	41	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	143	0	14	115	17	1	10	3	11	45	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	132			143			349	323	143	323	315	124
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	132			143			349	323	143	323	315	124
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	98	100	98	92	99
cM capacity (veh/h)	1453			1440			556	585	905	612	591	927

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	153	146	14	68
Volume Left	10	14	1	11
Volume Right	0	17	3	12
cSH	1453	1440	630	635
Volume to Capacity	0.00*	0.00*	0.02	0.11
Queue Length 95th (m)	0.2	0.2	0.5	2.7
Control Delay (s/veh)	0.5	0.8	10.8	11.3
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.5	0.8	10.8	11.3
Approach LOS			B	B

Intersection Summary				
Average Delay	2.9			
Intersection Capacity Utilization	23.0%	ICU Level of Service		A
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	63	25	10	96	26	23
Future Volume (vph)	63	25	10	96	26	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.962				0.936	
Flt Protected	0.965			0.995		
Satd. Flow (prot)	1672	0	0	1792	1685	0
Flt Permitted	0.965			0.995		
Satd. Flow (perm)	1672	0	0	1792	1685	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	68	27	11	104	28	25
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	0	115	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	63	25	10	96	26	23
Future Volume (Veh/h)	63	25	10	96	26	23
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	68	27	11	104	28	25
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	167	41	53			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	167	41	53			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	97	99			
cM capacity (veh/h)	818	1031	1553			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	95	115	53
Volume Left	68	11	0
Volume Right	27	0	25
cSH	869	1553	1700
Volume to Capacity	0.11	0.00*	0.03
Queue Length 95th (m)	2.8	0.2	0.0
Control Delay (s/veh)	9.7	0.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	9.7	0.8	0.0
Approach LOS	A		

Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	24.0%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	5	31	20	11	0
Future Volume (vph)	0	5	31	20	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.971		
Satd. Flow (prot)	1629	0	0	1829	1883	0
Flt Permitted				0.971		
Satd. Flow (perm)	1629	0	0	1829	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	378.1	
Travel Time (s)	16.7			24.3	19.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	5	34	22	12	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	0	0	56	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	5	31	20	11	0
Future Volume (Veh/h)	0	5	31	20	11	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	5	34	22	12	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	102	12	12			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	102	12	12			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	98			
cM capacity (veh/h)	877	1069	1607			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	5	56	12
Volume Left	0	34	0
Volume Right	5	0	0
cSH	1069	1607	1700
Volume to Capacity	0.00*	0.02	0.00*
Queue Length 95th (m)	0.1	0.5	0.0
Control Delay (s/veh)	8.4	4.5	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	4.5	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	6	69	0	5	5	2
Future Volume (vph)	6	69	0	5	5	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.877				0.961	
Flt Protected					0.966	
Satd. Flow (prot)	1579	0	0	1801	1672	0
Flt Permitted					0.966	
Satd. Flow (perm)	1579	0	0	1801	1672	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	75	0	5	5	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	82	0	0	5	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	6	69	0	5	5	2
Future Volume (Veh/h)	6	69	0	5	5	2
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	75	0	5	5	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	12	0	90	11	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	12	0	90	11	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	99	93	100	99	100	
cM capacity (veh/h)	880	1085	826	881	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	82	5	7
Volume Left	0	0	5
Volume Right	75	0	2
cSH	1064	881	1623
Volume to Capacity	0.08	0.00*	0.00*
Queue Length 95th (m)	1.9	0.1	0.1
Control Delay (s/veh)	8.7	9.1	5.2
Lane LOS	A	A	A
Approach Delay (s/veh)	8.7	9.1	5.2
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.4		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

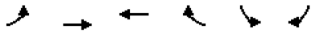
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	48	23	37	48	0
Future Volume (vph)	1	48	23	37	48	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.868					
Flt Protected	0.999			0.981		
Satd. Flow (prot)	1508	0	0	1766	1801	0
Flt Permitted	0.999			0.981		
Satd. Flow (perm)	1508	0	0	1766	1801	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	52	25	40	52	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	53	0	0	65	52	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	48	23	37	48	0
Future Volume (Veh/h)	1	48	23	37	48	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	52	25	40	52	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	142	52	52			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	142	52	52			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	95	98			
cM capacity (veh/h)	837	1016	1554			

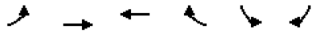
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	53	65	52
Volume Left	1	25	0
Volume Right	52	0	0
cSH	1012	1554	1700
Volume to Capacity	0.05	0.02	0.03
Queue Length 95th (m)	1.3	0.4	0.0
Control Delay (s/veh)	8.8	2.9	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.8	2.9	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization		19.9%	ICU Level of Service	A
Analysis Period (min)		15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	23	183	83	49	92	44
Future Volume (vph)	23	183	83	49	92	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.950		0.956	
Flt Protected		0.994			0.967	
Satd. Flow (prot)	0	1790	1711	0	1607	0
Flt Permitted		0.994			0.967	
Satd. Flow (perm)	0	1790	1711	0	1607	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	199	90	53	100	48
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	224	143	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	23	183	83	49	92	44
Future Volume (Veh/h)	23	183	83	49	92	44
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	25	199	90	53	100	48
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	1.00				1.00	1.00
vC, conflicting volume	143				366	117
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	142				365	115
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				84	95
cM capacity (veh/h)	1440				623	936

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	224	143	148
Volume Left	25	0	100
Volume Right	0	53	48
cSH	1440	1700	699
Volume to Capacity	0.02	0.08	0.21
Queue Length 95th (m)	0.4	0.0	6.1
Control Delay (s/veh)	1.0	0.0	11.5
Lane LOS	A		B
Approach Delay (s/veh)	1.0	0.0	11.5
Approach LOS			B

Intersection Summary			
Average Delay	3.7		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	50	5	2	32	20	8
Future Volume (vph)	50	5	2	32	20	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.989				0.961	
Flt Protected				0.997	0.966	
Satd. Flow (prot)	1719	0	0	1733	1672	0
Flt Permitted				0.997	0.966	
Satd. Flow (perm)	1719	0	0	1733	1672	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	5	2	35	22	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	0	37	31	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	50	5	2	32	20	8
Future Volume (Veh/h)	50	5	2	32	20	8
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	5	2	35	22	9
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	53	0	81	49	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	53	0	81	49	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	93	100	100	96	99	
cM capacity (veh/h)	827	1085	849	832	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	59	37	31
Volume Left	0	2	22
Volume Right	5	0	9
cSH	844	833	1623
Volume to Capacity	0.07	0.04	0.01
Queue Length 95th (m)	1.7	1.1	0.3
Control Delay (s/veh)	9.6	9.5	5.2
Lane LOS	A	A	A
Approach Delay (s/veh)	9.6	9.5	5.2
Approach LOS	A	A	

Intersection Summary				
Average Delay		8.5		
Intersection Capacity Utilization		13.3%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	52	142	28	4	1	166	1	30	6	2	40
Future Volume (vph)	14	52	142	28	4	1	166	1	30	6	2	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.908			0.996			0.979			0.888	
Flt Protected		0.997			0.959			0.960			0.993	
Satd. Flow (prot)	0	1630	0	0	1720	0	0	1692	0	0	1588	0
Flt Permitted		0.997			0.959			0.960			0.993	
Satd. Flow (perm)	0	1630	0	0	1720	0	0	1692	0	0	1588	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	57	154	30	4	1	180	1	33	7	2	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	226	0	0	35	0	0	214	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	52	142	28	4	1	166	1	30	6	2	40
Future Volume (Veh/h)	14	52	142	28	4	1	166	1	30	6	2	40
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	57	154	30	4	1	180	1	33	7	2	43
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked												
vC, conflicting volume	5			211			273	229	134	262	306	5
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	5			211			273	229	134	262	306	5
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			72	100	96	99	100	96
cM capacity (veh/h)	1616			1360			636	650	915	649	589	1079

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	226	35	214	52
Volume Left	15	30	180	7
Volume Right	154	1	33	43
cSH	1616	1360	667	962
Volume to Capacity	0.00*	0.02	0.32	0.05
Queue Length 95th (m)	0.2	0.5	10.5	1.3
Control Delay (s/veh)	0.6	6.6	12.9	9.0
Lane LOS	A	A	B	A
Approach Delay (s/veh)	0.6	6.6	12.9	9.0
Approach LOS			B	A

Intersection Summary				
Average Delay		6.8		
Intersection Capacity Utilization		36.3%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	5	1	54	64	2
Future Volume (vph)	2	5	1	54	64	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.904				0.996	
Flt Protected	0.986			0.999		
Satd. Flow (prot)	1550	0	0	1799	1793	0
Flt Permitted	0.986			0.999		
Satd. Flow (perm)	1550	0	0	1799	1793	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	5	1	59	70	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	60	72	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

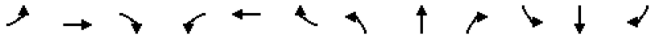
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	5	1	54	64	2
Future Volume (Veh/h)	2	5	1	54	64	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	5	1	59	70	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	132	71	72			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	132	71	72			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	861	991	1528			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	7	60	72
Volume Left	2	1	0
Volume Right	5	0	2
cSH	950	1528	1700
Volume to Capacity	0.00*	0.00*	0.04
Queue Length 95th (m)	0.2	0.0	0.0
Control Delay (s/veh)	8.8	0.1	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.8	0.1	0.0
Approach LOS	A		

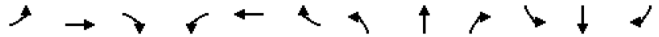
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	13.6%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	12	11	0	0	34	45	34	0	16	0
Future Volume (vph)	0	0	12	11	0	0	34	45	34	0	16	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.959				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	12	11	0	0	34	45	34	0	16	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	12	0	0	11	0	0	113	0	0	16	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	12	11	0	0	34	45	34	0	16	0
Future Volume (Veh/h)	0	0	12	11	0	0	34	45	34	0	16	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	12	11	0	0	34	45	34	0	16	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			12			36	28	6	85	34	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			12			36	28	6	85	34	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			96	95	97	100	98	100
cM capacity (veh/h)	1623			1607			951	859	1077	834	853	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	12	11	113	16
Volume Left	0	11	34	0
Volume Right	12	0	34	0
cSH	1623	1607	944	853
Volume to Capacity	0.00	0.00*	0.12	0.02
Queue Length 95th (m)	0.0	0.2	3.1	0.4
Control Delay (s/veh)	0.0	7.3	9.3	9.3
Lane LOS		A	A	A
Approach Delay (s/veh)	0.0	7.3	9.3	9.3
Approach LOS			A	A

Intersection Summary				
Average Delay		8.4		
Intersection Capacity Utilization		26.9%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	5	13	51	16	0
Future Volume (vph)	0	5	13	51	16	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.990		
Satd. Flow (prot)	1629	0	0	1865	1883	0
Flt Permitted				0.990		
Satd. Flow (perm)	1629	0	0	1865	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			22.6	24.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	5	14	55	17	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	5	0	0	69	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	5	13	51	16	0
Future Volume (Veh/h)	0	5	13	51	16	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	5	14	55	17	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	100	17	17			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	100	17	17			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	891	1062	1600			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	5	69	17
Volume Left	0	14	0
Volume Right	5	0	0
cSH	1062	1600	1700
Volume to Capacity	0.00*	0.00*	0.01
Queue Length 95th (m)	0.1	0.2	0.0
Control Delay (s/veh)	8.4	1.5	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	1.5	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

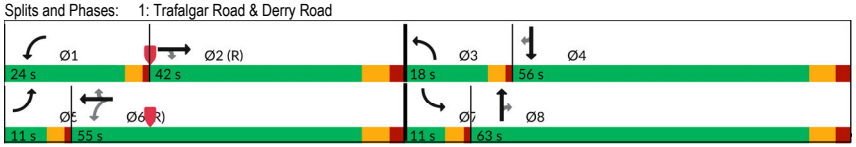
* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
Future Volume (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	1		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1570	1807	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.950			0.170			0.950			0.950		
Satd. Flow (perm)	3372	4476	1570	323	4565	1601	3173	4254	1566	3204	4254	1566
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			176			123			163			155
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
Shared Lane Traffic (%)												
Lane Group Flow (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	11.0	42.0	42.0	24.0	55.0	55.0	18.0	63.0	63.0	11.0	56.0	56.0
Total Split (%)	7.9%	30.0%	30.0%	17.1%	39.3%	39.3%	12.9%	45.0%	45.0%	7.9%	40.0%	40.0%
Maximum Green (s)	7.0	35.1	35.1	20.0	48.1	48.1	14.0	56.2	56.2	7.0	49.2	49.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.7	37.1	37.1	63.7	50.1	50.1	15.0	57.5	57.5	8.0	50.5	50.5
Actuated g/C Ratio	0.06	0.27	0.27	0.46	0.36	0.36	0.11	0.41	0.41	0.06	0.36	0.36
v/c Ratio	1.06	0.61	0.33	0.98	1.03	0.15	1.08	0.81	0.29	0.82	0.75	0.82
Control Delay (s/veh)	147.6	43.0	5.3	85.0	66.6	6.6	107.1	35.8	12.6	85.9	49.3	46.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	147.6	43.0	5.3	85.0	66.6	6.6	107.1	35.8	12.6	85.9	49.3	46.0
LOS	F	D	A	F	E	A	F	D	B	F	D	D
Approach Delay (s/veh)		57.7			67.1			46.4			51.3	
Approach LOS		E			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay (s/veh): 55.7		Intersection LOS: E	
Intersection Capacity Utilization 88.0%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
v/c Ratio	1.06	0.61	0.33	0.98	1.03	0.15	1.08	0.81	0.29	0.82	0.75	0.82
Control Delay (s/veh)	147.6	43.0	5.3	85.0	66.6	6.6	107.1	35.8	12.6	85.9	49.3	46.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	147.6	43.0	5.3	85.0	66.6	6.6	107.1	35.8	12.6	85.9	49.3	46.0
Queue Length 50th (m)	~39.7	75.7	0.3	~80.8	~176.0	0.0	~58.0	160.2	32.8	22.6	100.1	90.2
Queue Length 95th (m)	#67.9	92.3	12.7	#143.7	#238.0	12.0	m#86.7	m189.5	m41.5	#40.2	130.4	126.5
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	209	1186	545	376	1633	651	339	1768	746	183	1555	671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.06	0.61	0.33	0.98	1.03	0.15	1.08	0.80	0.29	0.82	0.74	0.81

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
Future Volume (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1570	1807	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.95	1.00	1.00	0.17	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1570	323	4565	1601	3173	4254	1566	3204	4254	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	222	726	178	368	1677	97	367	1421	215	150	1152	545
RTOR Reduction (vph)	0	0	129	0	0	62	0	0	96	0	0	99
Lane Group Flow (vph)	222	726	49	368	1677	35	367	1421	119	150	1152	446
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2	6		6			8			4
Actuated Green, G (s)	7.7	35.1	35.1	59.8	48.1	48.1	14.0	55.5	55.5	7.0	48.5	48.5
Effective Green, g (s)	8.7	37.1	37.1	60.8	50.1	50.1	15.0	57.5	57.5	8.0	50.5	50.5
Actuated g/C Ratio	0.06	0.27	0.27	0.43	0.36	0.36	0.11	0.41	0.41	0.06	0.36	0.36
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	209	1186	416	370	1633	572	339	1747	643	183	1534	564
v/s Ratio Prot	c0.07	0.16		c0.15	c0.37		c0.12	c0.33		0.05	0.27	
v/s Ratio Perm			0.03	0.28		0.02			0.08			0.28
v/c Ratio	1.06	0.61	0.12	0.99	1.03	0.06	1.08	0.81	0.18	0.82	0.75	0.79
Uniform Delay, d1	65.6	45.1	39.0	34.5	44.9	29.5	62.5	36.5	26.3	65.3	39.2	40.0
Progression Factor	1.19	0.90	0.66	1.62	0.88	2.66	0.70	0.89	1.63	0.88	1.17	1.26
Incremental Delay, d2	78.6	2.3	0.6	41.5	27.7	0.2	64.9	2.4	0.2	23.6	2.2	7.4
Delay (s)	156.5	42.8	26.2	97.3	67.1	78.6	108.5	35.0	43.2	80.8	48.2	57.8
Level of Service	F	D	C	F	E	E	F	C	D	F	D	E
Approach Delay (s/veh)		62.6			72.8			49.3			53.7	
Approach LOS		E			E			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	59.6	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.98			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	88.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

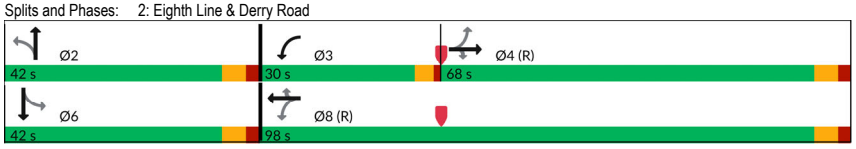
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	941	78	61	1914	6	68	10	57	15	25	6
Future Volume (vph)	8	941	78	61	1914	6	68	10	57	15	25	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.872			0.971	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1670	0	1825	1865	0
Flt Permitted	0.075			0.238			0.737			0.713		
Satd. Flow (perm)	144	4520	1555	457	4565	1633	1416	1670	0	1370	1865	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			78			23		57			6	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	8	941	78	61	1914	6	68	10	57	15	25	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	941	78	61	1914	6	68	67	0	15	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		6	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		10.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		36.0	36.0	
Total Split (s)	68.0	68.0	68.0	30.0	98.0	98.0	42.0	42.0		42.0	42.0	
Total Split (%)	48.6%	48.6%	48.6%	21.4%	70.0%	70.0%	30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	62.0	62.0	62.0	26.0	92.0	92.0	36.0	36.0		36.0	36.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0		23.0	23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0		0	0	
Act Effct Green (s)	106.9	106.9	106.9	117.2	115.2	115.2	12.8	12.8		12.8	12.8	
Actuated g/C Ratio	0.76	0.76	0.76	0.84	0.82	0.82	0.09	0.09		0.09	0.09	
v/c Ratio	0.07	0.27	0.06	0.14	0.51	0.00	0.53	0.33		0.12	0.18	
Control Delay (s/veh)	8.3	9.1	3.7	2.9	4.5	0.0	46.0	5.6		58.9	50.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.3	9.1	3.7	2.9	4.5	0.0	46.0	5.6		58.9	50.8	
LOS	A	A	A	A	A	A	D	A		E	D	
Approach Delay (s/veh)		8.7			4.4			25.9			53.4	
Approach LOS		A			A			C			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 85		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.53		
Intersection Signal Delay (s/veh): 7.4		Intersection LOS: A
Intersection Capacity Utilization 71.1%		ICU Level of Service C
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	8	941	78	61	1914	6	68	67	15	31
v/c Ratio	0.07	0.27	0.06	0.14	0.51	0.00	0.53	0.33	0.12	0.18
Control Delay (s/veh)	8.3	9.1	3.7	2.9	4.5	0.0	46.0	5.6	58.9	50.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.3	9.1	3.7	2.9	4.5	0.0	46.0	5.6	58.9	50.8
Queue Length 50th (m)	1.6	85.0	7.7	2.2	52.8	0.0	9.1	0.0	3.9	6.5
Queue Length 95th (m)	m1.4	29.2	4.6	5.5	77.2	0.0	16.7	1.2	10.7	16.1
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	110	3450	1205	636	3757	1348	364	471	352	484
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.27	0.06	0.10	0.51	0.00	0.19	0.14	0.04	0.06

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	941	78	61	1914	6	68	10	57	15	25	6
Future Volume (vph)	8	941	78	61	1914	6	68	10	57	15	25	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1671		1825	1865	
Flt Permitted	0.07	1.00	1.00	0.24	1.00	1.00	0.74	1.00		0.71	1.00	
Satd. Flow (perm)	144	4520	1555	457	4565	1633	1416	1671		1370	1865	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	8	941	78	61	1914	6	68	10	57	15	25	6
RTOR Reduction (vph)	0	0	19	0	0	1	0	52	0	0	5	0
Lane Group Flow (vph)	8	941	59	61	1914	5	68	15	0	15	26	0
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	106.0	106.0	106.0	115.2	115.2	115.2	12.8	12.8		12.8	12.8	
Effective Green, g (s)	106.0	106.0	106.0	115.2	115.2	115.2	12.8	12.8		12.8	12.8	
Actuated g/C Ratio	0.76	0.76	0.76	0.82	0.82	0.82	0.09	0.09		0.09	0.09	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	109	3422	1177	426	3756	1343	129	152		125	170	
v/s Ratio Prot		0.21		0.01	c0.42			0.01			0.01	
v/s Ratio Perm	0.06		0.04	0.11		0.00	c0.05			0.01		
v/c Ratio	0.07	0.27	0.05	0.14	0.51	0.00	0.53	0.10		0.12	0.15	
Uniform Delay, d1	4.4	5.2	4.3	2.5	3.8	2.2	60.7	58.3		58.4	58.6	
Progression Factor	1.13	1.63	2.98	1.00	1.00	1.00	0.52	0.08		1.00	1.00	
Incremental Delay, d2	1.2	0.2	0.1	0.2	0.5	0.0	3.8	0.3		0.4	0.4	
Delay (s)	6.2	8.7	12.9	2.7	4.3	2.2	35.4	4.8		58.9	59.0	
Level of Service	A	A	B	A	A	A	D	A		E	E	
Approach Delay (s/veh)		9.0			4.2			20.3			59.0	
Approach LOS		A			A			C			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	7.2	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	71.1%	ICU Level of Service	C	
Analysis Period (min)	15			

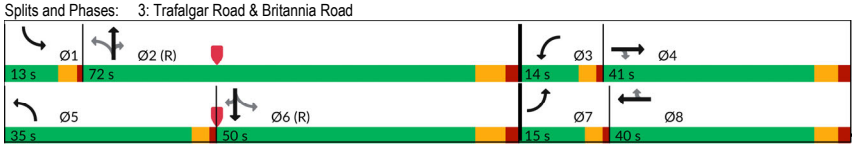
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
Future Volume (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	1652	4336	1566	1604	4295	1536
Flt Permitted	0.950			0.950			0.085			0.097		
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	148	4336	1566	164	4295	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			189			125			138			200
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
Shared Lane Traffic (%)												
Lane Group Flow (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	15.0	41.0	41.0	14.0	40.0	40.0	35.0	72.0	72.0	13.0	50.0	50.0
Total Split (%)	10.7%	29.3%	29.3%	10.0%	28.6%	28.6%	25.0%	51.4%	51.4%	9.3%	35.7%	35.7%
Maximum Green (s)	11.0	35.0	35.0	10.0	34.0	34.0	31.0	65.0	65.0	9.0	43.0	43.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	12.0	33.2	33.2	10.6	31.8	31.8	86.2	71.4	71.4	56.9	45.0	45.0
Actuated g/C Ratio	0.09	0.24	0.24	0.08	0.23	0.23	0.62	0.51	0.51	0.41	0.32	0.32
v/c Ratio	1.00	0.51	0.36	0.55	0.76	0.27	0.98	0.71	0.21	0.63	1.00	0.76
Control Delay (s/veh)	118.8	47.8	7.3	72.5	46.5	6.1	58.2	55.2	24.0	61.5	58.3	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	118.8	47.8	7.3	72.5	46.5	6.1	58.2	55.2	24.0	61.5	58.3	20.5
LOS	F	D	A	E	D	A	E	E	C	E	E	C
Approach Delay (s/veh)		58.8			45.5			53.3			49.2	
Approach LOS		E			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 51.6		Intersection LOS: D	
Intersection Capacity Utilization 89.6%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
v/c Ratio	1.00	0.51	0.36	0.55	0.76	0.27	0.98	0.71	0.21	0.63	1.00	0.76
Control Delay (s/veh)	118.8	47.8	7.3	72.5	46.5	6.1	58.2	55.2	24.0	61.5	58.3	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	118.8	47.8	7.3	72.5	46.5	6.1	58.2	55.2	24.0	61.5	58.3	20.5
Queue Length 50th (m)	42.7	55.3	0.0	20.8	86.7	6.3	127.3	190.5	27.2	15.2	~167.3	80.4
Queue Length 95th (m)	#75.2	67.1	18.8	27.9	100.9	10.0	m#137.9	m193.0	m28.0	m27.0	m#203.5	m116.8
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	261	1182	557	278	1173	489	480	2210	865	174	1380	629
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.45	0.34	0.53	0.67	0.25	0.98	0.71	0.21	0.61	1.00	0.76

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
Future Volume (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	1652	4336	1566	1604	4295	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.09	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	148	4336	1566	163	4295	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	261	536	189	148	786	120	470	1575	180	106	1386	479
RTOR Reduction (vph)	0	0	144	0	0	93	0	0	68	0	0	136
Lane Group Flow (vph)	261	536	45	148	786	27	470	1575	112	106	1386	343
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8	2		2	6		6
Actuated Green, G (s)	11.0	31.2	31.2	9.6	29.8	29.8	82.2	69.3	69.3	51.9	43.0	43.0
Effective Green, g (s)	12.0	33.2	33.2	10.6	31.8	31.8	83.2	71.3	71.3	53.9	45.0	45.0
Actuated g/C Ratio	0.09	0.24	0.24	0.08	0.23	0.23	0.59	0.51	0.51	0.39	0.32	0.32
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	261	1061	375	268	1036	350	476	2208	797	164	1380	493
v/s Ratio Prot	c0.09	0.12		0.04	c0.17		c0.25	0.36		0.05	0.32	
v/s Ratio Perm			0.03			0.02	c0.33		0.07	0.20		0.22
v/c Ratio	1.00	0.51	0.12	0.55	0.76	0.08	0.99	0.71	0.14	0.65	1.00	0.70
Uniform Delay, d1	64.0	46.3	41.9	62.4	50.5	42.6	43.5	26.5	18.2	28.8	47.5	41.5
Progression Factor	1.00	1.00	1.00	1.04	0.82	0.78	1.03	1.99	4.19	1.83	0.75	0.56
Incremental Delay, d2	55.7	0.4	0.1	2.4	3.1	0.1	18.1	0.5	0.1	6.5	22.2	6.1
Delay (s)	119.7	46.7	42.1	67.0	44.8	33.1	62.8	53.3	76.1	59.2	57.8	29.5
Level of Service	F	D	D	E	D	C	E	D	E	E	E	C
Approach Delay (s/veh)		65.1			46.5			57.1			51.0	
Approach LOS		E			D			E			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	54.7	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	89.6%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

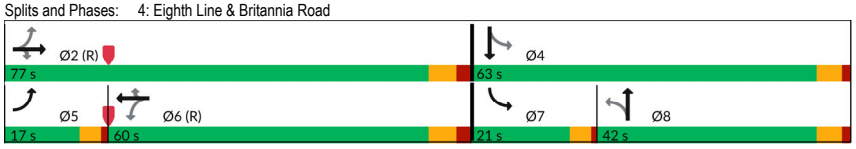
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	777	12	24	990	37	31	83	36	47	77	33
Future Volume (vph)	15	777	12	24	990	37	31	83	36	47	77	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.955			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1813	0	1825	1785	0
Flt Permitted	0.211			0.309			0.686			0.427		
Satd. Flow (perm)	405	4476	1328	594	4520	1633	1318	1813	0	820	1785	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		15			19	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	15	777	12	24	990	37	31	83	36	47	77	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	777	12	24	990	37	31	119	0	47	110	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	17.0	77.0	77.0	60.0	60.0	60.0	42.0	42.0		21.0	63.0	
Total Split (%)	12.1%	55.0%	55.0%	42.9%	42.9%	42.9%	30.0%	30.0%		15.0%	45.0%	
Maximum Green (s)	12.5	70.2	70.2	53.2	53.2	53.2	36.3	36.3		16.5	57.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	102.7	100.4	100.4	96.1	96.1	96.1	15.9	15.9		28.3	27.1	
Actuated g/C Ratio	0.73	0.72	0.72	0.69	0.69	0.69	0.11	0.11		0.20	0.19	
v/c Ratio	0.04	0.24	0.01	0.06	0.32	0.03	0.21	0.54		0.21	0.30	
Control Delay (s/veh)	4.9	4.5	0.0	11.0	10.5	0.1	53.6	55.1		54.2	49.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	4.9	4.5	0.0	11.0	10.5	0.1	53.6	55.1		54.2	49.0	
LOS	A	A	A	B	B	A	D	E		D	D	
Approach Delay (s/veh)		4.5			10.1			54.8			50.6	
Approach LOS		A			B			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.54		
Intersection Signal Delay (s/veh): 14.1	Intersection LOS: B	
Intersection Capacity Utilization 61.9%	ICU Level of Service B	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	15	777	12	24	990	37	31	119	47	110
v/c Ratio	0.04	0.24	0.01	0.06	0.32	0.03	0.21	0.54	0.21	0.30
Control Delay (s/veh)	4.9	4.5	0.0	11.0	10.5	0.1	53.6	55.1	54.2	49.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	4.9	4.5	0.0	11.0	10.5	0.1	53.6	55.1	54.2	49.0
Queue Length 50th (m)	0.6	13.4	0.0	1.8	39.3	0.0	8.1	28.0	12.1	25.3
Queue Length 95th (m)	m1.7	23.3	m0.0	7.3	70.9	0.0	m13.4	42.0	22.7	41.4
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	423	3209	968	407	3101	1149	341	481	284	741
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.24	0.01	0.06	0.32	0.03	0.09	0.25	0.17	0.15

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	777	12	24	990	37	31	83	36	47	77	33
Future Volume (vph)	15	777	12	24	990	37	31	83	36	47	77	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1812		1825	1785	
Flt Permitted	0.21	1.00	1.00	0.31	1.00	1.00	0.69	1.00		0.43	1.00	
Satd. Flow (perm)	406	4476	1328	595	4520	1633	1318	1812		821	1785	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	15	777	12	24	990	37	31	83	36	47	77	33
RTOR Reduction (vph)	0	0	3	0	0	13	0	13	0	0	15	0
Lane Group Flow (vph)	15	777	9	24	990	24	31	106	0	47	95	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	99.5	99.5	99.5	92.5	92.5	92.5	15.9	15.9		28.0	28.0	
Effective Green, g (s)	99.5	99.5	99.5	92.5	92.5	92.5	15.9	15.9		28.0	28.0	
Actuated g/C Ratio	0.71	0.71	0.71	0.66	0.66	0.66	0.11	0.11		0.20	0.20	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	313	3181	943	393	2986	1078	149	205		218	357	
v/s Ratio Prot	0.00	c0.17			c0.22			c0.06		0.01	c0.05	
v/s Ratio Perm	0.03		0.01	0.04		0.01	0.02			0.03		
v/c Ratio	0.05	0.24	0.01	0.06	0.33	0.02	0.21	0.52		0.22	0.27	
Uniform Delay, d1	6.4	7.1	5.9	8.4	10.3	8.2	56.3	58.4		46.2	47.3	
Progression Factor	0.72	0.59	1.00	1.00	1.00	1.00	0.90	0.91		1.22	1.23	
Incremental Delay, d2	0.1	0.2	0.0	0.3	0.3	0.0	0.7	2.0		0.5	0.4	
Delay (s)	4.7	4.3	5.9	8.7	10.6	8.2	51.5	54.9		56.7	58.8	
Level of Service	A	A	A	A	B	A	D	D		E	E	
Approach Delay (s/veh)		4.4			10.5			54.2			58.2	
Approach LOS		A			B			D			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	14.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.36			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	21.5	
Intersection Capacity Utilization	61.9%	ICU Level of Service	B	
Analysis Period (min)	15			

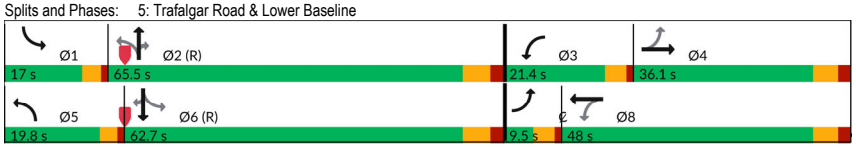
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	209	34	204	327	270	236	1900	297	233	1507	64
Future Volume (vph)	40	209	34	204	327	270	236	1900	297	233	1507	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt		0.979			0.932				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	1839	0	1807	1757	0	1745	4378	1581	1711	4295	1551
Flt Permitted	0.113			0.367			0.068			0.070		
Satd. Flow (perm)	209	1839	0	698	1757	0	125	4378	1581	126	4295	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			31				174			126
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	40	209	34	204	327	270	236	1900	297	233	1507	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	40	243	0	204	597	0	236	1900	297	233	1507	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		7.0	10.0		7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2		11.5	24.2		11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	36.1		21.4	48.0		19.8	65.5	65.5	17.0	62.7	62.7
Total Split (%)	6.8%	25.8%		15.3%	34.3%		14.1%	46.8%	46.8%	12.1%	44.8%	44.8%
Maximum Green (s)	5.0	29.9		16.9	41.8		15.8	58.9	58.9	13.0	56.1	56.1
Yellow Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0							
Flash Don't Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	42.3	35.6		54.0	45.7		78.4	60.9	60.9	74.6	59.0	59.0
Actuated g/C Ratio	0.30	0.25		0.39	0.33		0.56	0.44	0.44	0.53	0.42	0.42
v/c Ratio	0.31	0.52		0.54	1.01		0.93	1.00	0.38	1.04	0.83	0.09
Control Delay (s/veh)	34.5	49.3		43.0	83.7		78.1	59.5	11.9	101.9	58.3	9.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.5	49.3		43.0	83.7		78.1	59.5	11.9	101.9	58.3	9.2
LOS	C	D		D	F		E	E	B	F	E	A
Approach Delay (s/veh)		47.2			73.3			55.5			62.2	
Approach LOS		D			E			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay (s/veh): 60.0		Intersection LOS: E	
Intersection Capacity Utilization 101.5%		ICU Level of Service G	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	40	243	204	597	236	1900	297	233	1507	64
v/c Ratio	0.31	0.52	0.54	1.01	0.93	1.00	0.38	1.04	0.83	0.09
Control Delay (s/veh)	34.5	49.3	43.0	83.7	78.1	59.5	11.9	101.9	58.3	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.5	49.3	43.0	83.7	78.1	59.5	11.9	101.9	58.3	9.2
Queue Length 50th (m)	7.1	58.1	40.1	~127.7	48.5	221.0	20.8	~64.1	145.0	2.1
Queue Length 95th (m)	15.4	88.7	72.1	#243.4	#96.3	#266.1	43.3	m#77.6	m149.1	m3.8
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	129	471	411	594	265	1904	786	225	1808	726
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.52	0.50	1.01	0.89	1.00	0.38	1.04	0.83	0.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	209	34	204	327	270	236	1900	297	233	1507	64
Future Volume (vph)	40	209	34	204	327	270	236	1900	297	233	1507	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	1.00
Frt	1.00	0.98		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1755	1839		1807	1757		1745	4378	1581	1711	4295	1551
Flt Permitted	0.11	1.00		0.37	1.00		0.07	1.00	1.00	0.07	1.00	1.00
Satd. Flow (perm)	208	1839		698	1757		125	4378	1581	126	4295	1551
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	40	209	34	204	327	270	236	1900	297	233	1507	64
RTOR Reduction (vph)	0	4	0	0	21	0	0	0	99	0	0	37
Lane Group Flow (vph)	40	239	0	204	576	0	236	1900	198	233	1507	27
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	38.5	34.5		52.2	43.7		72.9	58.0	58.0	69.1	56.1	56.1
Effective Green, g (s)	40.5	36.5		53.2	45.7		74.9	60.0	60.0	71.1	58.1	58.1
Actuated g/C Ratio	0.29	0.26		0.38	0.33		0.54	0.43	0.43	0.51	0.42	0.42
Clearance Time (s)	4.5	6.2		4.5	6.2		4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0		0.2	5.0		0.2	5.0	5.0	0.2	5.0	5.0
Lane Grp Cap (vph)	115	479		377	573		250	1876	677	222	1782	643
v/s Ratio Prot	0.01	0.13		c0.05	c0.33		c0.11	c0.43		c0.10	0.35	
v/s Ratio Perm	0.09			0.15			0.40		0.12	0.43		0.02
v/c Ratio	0.35	0.50		0.54	1.01		0.94	1.01	0.29	1.05	0.85	0.04
Uniform Delay, d1	39.8	44.0		31.4	47.1		43.4	40.0	26.1	44.9	36.9	24.4
Progression Factor	1.00	1.00		1.28	1.11		1.00	1.00	1.00	1.40	1.52	1.00
Incremental Delay, d2	1.8	1.7		0.7	35.4		41.1	24.0	1.1	56.2	2.7	0.1
Delay (s)	41.6	45.7		40.9	87.9		84.5	64.0	27.2	119.3	58.8	24.4
Level of Service	D	D		D	F		F	E	C	F	E	C
Approach Delay (s/veh)		45.1			75.9			61.5			65.4	
Approach LOS		D			E			E			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	64.1	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.01			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	101.5%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

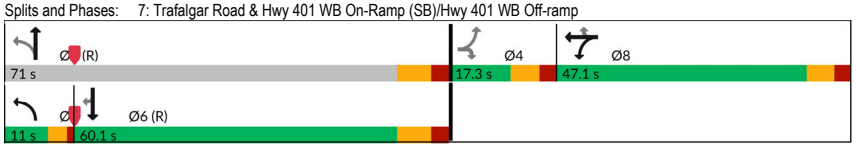
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	16	693	27	1396	6	999	0	0	884	45
Future Volume (vph)	17	0	16	693	27	1396	6	999	0	0	884	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	4309	0	0	4350	1306
Flt Permitted	0.597			0.950			0.130					
Satd. Flow (perm)	1147	0	1633	3372	1921	2737	250	4309	0	0	4350	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			300						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Adj. Flow (vph)	17	0	16	693	27	1396	6	999	0	0	884	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	16	693	27	1396	6	999	0	0	884	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.7		10.7	64.2	64.2	64.2	49.2	45.1			42.9	42.9
Actuated g/C Ratio	0.08		0.08	0.47	0.47	0.47	0.36	0.33			0.32	0.32
v/c Ratio	0.19		0.06	0.43	0.03	0.96	0.03	0.70			0.64	0.09
Control Delay (s/veh)	63.0		0.5	27.6	25.5	44.1	24.7	41.6			42.0	0.4
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.0		0.5	27.6	25.5	44.1	24.7	41.6			42.0	0.4
LOS	E		A	C	C	D	C	D			D	A
Approach Delay (s/veh)		32.7			38.4			41.5			40.0	
Approach LOS		C			D			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 135.5		
Actuated Cycle Length: 135.5		
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.96		
Intersection Signal Delay (s/veh): 39.5	Intersection LOS: D	
Intersection Capacity Utilization 87.5%	ICU Level of Service E	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	16	693	27	1396	6	999	884	45
v/c Ratio	0.19	0.06	0.43	0.03	0.96	0.03	0.70	0.64	0.09
Control Delay (s/veh)	63.0	0.5	27.6	25.5	44.1	24.7	41.6	42.0	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.0	0.5	27.6	25.5	44.1	24.7	41.6	42.0	0.4
Queue Length 50th (m)	4.4	0.0	70.4	4.1	~208.5	1.0	102.3	86.6	0.0
Queue Length 95th (m)	12.1	0.0	103.4	11.7	#290.2	3.7	108.5	106.3	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	90	248	1596	909	1453	172	2003	1669	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.06	0.43	0.03	0.96	0.03	0.50	0.53	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	16	693	27	1396	6	999	0	0	884	45
Future Volume (vph)	17	0	16	693	27	1396	6	999	0	0	884	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	4309			4350	1306
Flt Permitted	0.60		1.00	0.95	1.00	1.00	0.13	1.00			1.00	1.00
Satd. Flow (perm)	1147		1633	3372	1921	2737	250	4309			4350	1306
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	16	693	27	1396	6	999	0	0	884	45
RTOR Reduction (vph)	0	0	15	0	0	158	0	0	0	0	0	33
Lane Group Flow (vph)	17	0	1	693	27	1238	6	999	0	0	884	12
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.7		6.7	64.2	64.2	64.2	42.1	42.1			36.7	36.7
Effective Green, g (s)	6.7		6.7	64.2	64.2	64.2	42.1	42.1			36.7	36.7
Actuated g/C Ratio	0.05		0.05	0.47	0.47	0.47	0.31	0.31			0.27	0.27
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		80	1597	910	1296	93	1338			1178	353
v/s Ratio Prot				0.21	0.01		0.00	c0.23			0.20	
v/s Ratio Perm	c0.01		0.00			c0.45	0.02					0.01
v/c Ratio	0.30		0.01	0.43	0.03	0.96	0.06	0.75			0.75	0.03
Uniform Delay, d1	62.1		61.2	23.6	19.0	34.3	34.0	41.9			45.2	36.4
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.1		0.0	0.1	0.0	15.3	0.1	3.8			4.4	0.2
Delay (s)	65.2		61.3	23.7	19.0	49.6	34.1	45.7			49.6	36.5
Level of Service	E		E	C	B	D	C	D			D	D
Approach Delay (s/veh)		63.3			40.7			45.7			49.0	
Approach LOS		E			D			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	44.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

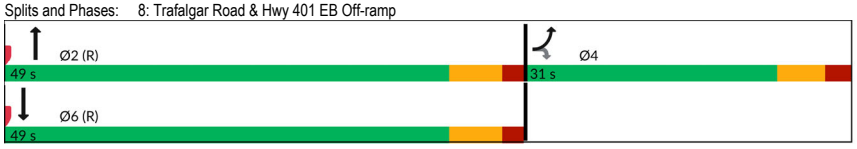
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	493	0	1226	1162	0
Future Volume (vph)	147	493	0	1226	1162	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.906	0.850				
Flt Protected	0.982					
Satd. Flow (prot)	2961	1327	0	4309	4350	0
Flt Permitted	0.982					
Satd. Flow (perm)	2961	1327	0	4309	4350	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	56	56				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Adj. Flow (vph)	147	493	0	1226	1162	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	394	246	0	1226	1162	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	17.4	17.4		48.6	48.6	
Actuated g/C Ratio	0.22	0.22		0.61	0.61	
v/c Ratio	0.57	0.74		0.47	0.44	
Control Delay (s/veh)	26.2	35.0		10.3	10.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	26.2	35.0		10.3	10.0	
LOS	C	D		B	B	
Approach Delay (s/veh)	29.6			10.3	10.0	
Approach LOS	C			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay (s/veh): 14.3		Intersection LOS: B	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	394	246	1226	1162
v/c Ratio	0.57	0.74	0.47	0.44
Control Delay (s/veh)	26.2	35.0	10.3	10.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.2	35.0	10.3	10.0
Queue Length 50th (m)	25.9	32.6	40.1	36.7
Queue Length 95th (m)	34.5	53.9	68.5	63.1
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	939	442	2633	2659
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.42	0.56	0.47	0.44

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	493	0	1226	1162	0
Future Volume (vph)	147	493	0	1226	1162	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.91	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2960	1327		4309	4350	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2960	1327		4309	4350	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	493	0	1226	1162	0
RTOR Reduction (vph)	44	44	0	0	0	0
Lane Group Flow (vph)	350	202	0	1226	1162	0
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	17.4	17.4		48.6	48.6	
Effective Green, g (s)	17.4	17.4		48.6	48.6	
Actuated g/C Ratio	0.22	0.22		0.61	0.61	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	643	288		2617	2642	
v/s Ratio Prot	0.12			c0.28	0.27	
v/s Ratio Perm		c0.15				
v/c Ratio	0.54	0.70		0.47	0.44	
Uniform Delay, d1	27.8	28.9		8.6	8.4	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	7.5		0.6	0.5	
Delay (s)	28.7	36.4		9.2	8.9	
Level of Service	C	D		A	A	
Approach Delay (s/veh)	31.7			9.2	8.9	
Approach LOS	C			A	A	

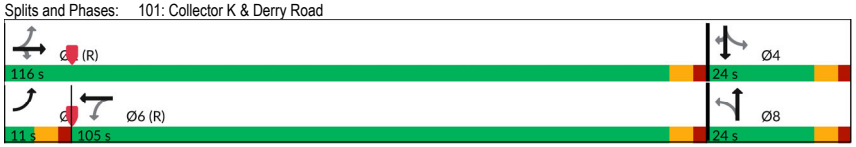
Intersection Summary				
HCM 2000 Control Delay (s/veh)	13.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	54.5%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	1114	96	0	2596	6	80	0	0	11	0	9
Future Volume (vph)	65	1114	96	0	2596	6	80	0	0	11	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		0.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		0	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850									0.850
Flt Protected	0.950						0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1883	4520	0	1789	1883	0	1789	1883	1601
Flt Permitted	0.038						0.757			0.757		
Satd. Flow (perm)	72	4520	1601	1883	4520	0	1426	1883	0	1426	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			96									70
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	65	1114	96	0	2596	6	80	0	0	11	0	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	1114	96	0	2602	0	80	0	0	11	0	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm			Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6			8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6		8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	116.0	116.0	105.0	105.0		24.0	24.0		24.0	24.0	24.0
Total Split (%)	7.9%	82.9%	82.9%	75.0%	75.0%		17.1%	17.1%		17.1%	17.1%	17.1%
Maximum Green (s)	5.0	110.0	110.0	99.0	99.0		18.0	18.0		18.0	18.0	18.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min		None	None		Max	Max	Max
Walk Time (s)		7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0		0	0		0	0	0
Act Effct Green (s)	107.9	107.9	107.9		99.1		20.1			20.1		20.1
Actuated g/C Ratio	0.77	0.77	0.77		0.71		0.14			0.14		0.14
v/c Ratio	0.56	0.32	0.08		0.81		0.39			0.05		0.03
Control Delay (s/veh)	33.3	5.1	0.7		6.9		62.2			54.5		0.2
Queue Delay	0.0	0.0	0.0		0.0		0.0			0.0		0.0
Total Delay (s/veh)	33.3	5.1	0.7		6.9		62.2			54.5		0.2
LOS	C	A	A		A		E			D		A
Approach Delay (s/veh)		6.2			6.9			62.2			30.1	
Approach LOS		A			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 7.9		Intersection LOS: A	
Intersection Capacity Utilization 75.1%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBT	NBL	SBL	SBR
Lane Group Flow (vph)	65	1114	96	2602	80	11	9
v/c Ratio	0.56	0.32	0.08	0.81	0.39	0.05	0.03
Control Delay (s/veh)	33.3	5.1	0.7	6.9	62.2	54.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.3	5.1	0.7	6.9	62.2	54.5	0.2
Queue Length 50th (m)	3.5	31.8	0.0	48.8	21.1	2.8	0.0
Queue Length 95th (m)	#18.3	37.2	3.4	m50.5	38.6	8.9	0.0
Internal Link Dist (m)		1030.4		235.0			
Turn Bay Length (m)	100.0		50.0		100.0	30.0	30.0
Base Capacity (vph)	116	3551	1278	3198	205	205	289
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.31	0.08	0.81	0.39	0.05	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	1114	96	0	2596	6	80	0	0	11	0	9
Future Volume (vph)	65	1114	96	0	2596	6	80	0	0	11	0	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		6.0		6.0			6.0		6.0
Lane Util. Factor	1.00	*0.80	1.00		*0.80		1.00			1.00		1.00
Frt	1.00	1.00	0.85		1.00		1.00			1.00		0.85
Flt Protected	0.95	1.00	1.00		1.00		0.95			0.95		1.00
Satd. Flow (prot)	1789	4520	1601		4519		1789			1789		1601
Flt Permitted	0.04	1.00	1.00		1.00		0.76			0.76		1.00
Satd. Flow (perm)	73	4520	1601		4519		1426			1426		1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	65	1114	96	0	2596	6	80	0	0	11	0	9
RTOR Reduction (vph)	0	0	22	0	0	0	0	0	0	0	0	8
Lane Group Flow (vph)	65	1114	74	0	2602	0	80	0	0	11	0	1
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm			Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6			8			4		4
Actuated Green, G (s)	107.9	107.9	107.9		97.9		20.1			20.1		20.1
Effective Green, g (s)	107.9	107.9	107.9		97.9		20.1			20.1		20.1
Actuated g/C Ratio	0.77	0.77	0.77		0.70		0.14			0.14		0.14
Clearance Time (s)	6.0	6.0	6.0		6.0		6.0			6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0			3.0		3.0
Lane Grp Cap (vph)	105	3483	1233		3160		204			204		229
v/s Ratio Prot	c0.02	0.25			c0.58							
v/s Ratio Perm	0.46		0.05				c0.06			0.01		0.00
v/c Ratio	0.62	0.32	0.06		0.82		0.39			0.05		0.01
Uniform Delay, d1	26.0	4.9	3.9		14.9		54.4			51.7		51.4
Progression Factor	1.00	1.00	1.00		0.43		1.00			1.00		1.00
Incremental Delay, d2	10.4	0.2	0.1		0.7		1.2			0.5		0.0
Delay (s)	36.4	5.1	4.0		7.1		55.7			52.2		51.4
Level of Service	D	A	A		A		E			D		D
Approach Delay (s/veh)		6.6			7.1			55.7			51.9	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1087	222	0	2109	5	0	0	92	0	0	31
Future Volume (vph)	0	1087	222	0	2109	5	0	0	92	0	0	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	4520	1601	0	4520	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	4520	1601	0	4520	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1087	222	0	2109	5	0	0	92	0	0	31
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1087	222	0	2114	0	0	0	92	0	0	31
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1087	222	0	2109	5	0	0	92	0	0	31
Future Volume (Veh/h)	0	1087	222	0	2109	5	0	0	92	0	0	31
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1087	222	0	2109	5	0	0	92	0	0	31
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.84			0.89			0.90	0.90	0.89	0.90	0.90	0.84
vC, conflicting volume	2114			1309			1821	3201	362	2566	3421	706
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1668			901			671	2205	0	1499	2449	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	90	100	100	97
cM capacity (veh/h)	321			665			297	39	962	69	28	914

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	362	362	362	222	844	844	427	92	31
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	222	0	0	5	92	31
cSH	1700	1700	1700	1700	1700	1700	1700	962	914
Volume to Capacity	0.21	0.21	0.21	0.13	0.50	0.50	0.25	0.10	0.03
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.8
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	9.1
Lane LOS								A	A
Approach Delay (s/veh)	0.0				0.0			9.1	9.1
Approach LOS								A	A

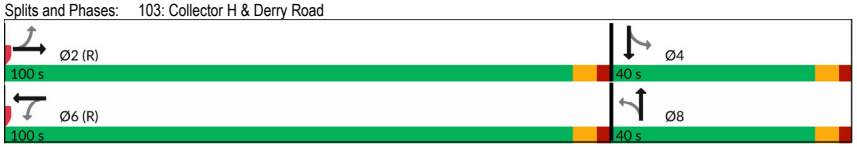
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	50.9%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1023	129	29	2049	9	108	0	14	19	7	58
Future Volume (vph)	64	1023	129	29	2049	9	108	0	14	19	7	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.999			0.985			0.907	
Flt Protected	0.950			0.950				0.958			0.989	
Satd. Flow (prot)	1789	4443	0	1789	4516	0	0	1777	0	0	1689	0
Flt Permitted	0.054			0.190				0.647			0.932	
Satd. Flow (perm)	102	4443	0	358	4516	0	0	1200	0	0	1592	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29			1			23			17	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	64	1023	129	29	2049	9	108	0	14	19	7	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	1152	0	29	2058	0	0	122	0	0	84	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	100.0	100.0		100.0	100.0		40.0	40.0		40.0	40.0	
Total Split (%)	71.4%	71.4%		71.4%	71.4%		28.6%	28.6%		28.6%	28.6%	
Maximum Green (s)	94.0	94.0		94.0	94.0		34.0	34.0		34.0	34.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	111.4	111.4		111.4	111.4			16.6			16.6	
Actuated g/C Ratio	0.80	0.80		0.80	0.80			0.12			0.12	
v/c Ratio	0.79	0.33		0.10	0.57			0.75			0.41	
Control Delay (s/veh)	78.5	2.5		4.5	6.4			74.3			47.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	78.5	2.5		4.5	6.4			74.3			47.4	
LOS	E	A		A	A			E			D	
Approach Delay (s/veh)		6.5			6.3			74.3			47.4	
Approach LOS		A			A			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 9.7		Intersection LOS: A	
Intersection Capacity Utilization 76.7%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	64	1152	29	2058	122	84
v/c Ratio	0.79	0.33	0.10	0.57	0.75	0.41
Control Delay (s/veh)	78.5	2.5	4.5	6.4	74.3	47.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	78.5	2.5	4.5	6.4	74.3	47.4
Queue Length 50th (m)	11.7	13.6	3.2	112.9	27.5	17.7
Queue Length 95th (m)	m#40.5	24.0	m2.4	49.4	47.4	32.4
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	81	3540	284	3593	308	399
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.33	0.10	0.57	0.40	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1023	129	29	2049	9	108	0	14	19	7	58
Future Volume (vph)	64	1023	129	29	2049	9	108	0	14	19	7	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.98			0.91	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4444		1789	4517			1776			1689	
Flt Permitted	0.05	1.00		0.19	1.00			0.65			0.93	
Satd. Flow (perm)	101	4444		359	4517			1200			1592	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	64	1023	129	29	2049	9	108	0	14	19	7	58
RTOR Reduction (vph)	0	6	0	0	0	0	0	20	0	0	15	0
Lane Group Flow (vph)	64	1146	0	29	2058	0	0	102	0	0	69	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	111.4	111.4		111.4	111.4			16.6			16.6	
Effective Green, g (s)	111.4	111.4		111.4	111.4			16.6			16.6	
Actuated g/C Ratio	0.80	0.80		0.80	0.80			0.12			0.12	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	80	3536		285	3594			142			188	
v/s Ratio Prot		0.26			0.46							
v/s Ratio Perm	c0.63			0.08				c0.08			0.04	
v/c Ratio	0.80	0.32		0.10	0.57			0.72			0.37	
Uniform Delay, d1	8.0	3.9		3.2	5.4			59.4			56.9	
Progression Factor	1.84	0.54		0.88	0.97			1.00			0.94	
Incremental Delay, d2	52.3	0.2		0.6	0.6			15.8			1.2	
Delay (s)	67.1	2.3		3.4	5.8			75.2			54.9	
Level of Service	E	A		A	A			E			D	
Approach Delay (s/veh)		5.7			5.7			75.2			54.9	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

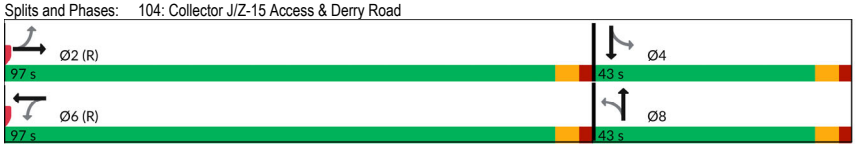
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1012	213	18	1970	9	144	0	20	19	0	88
Future Volume (vph)	30	1012	213	18	1970	9	144	0	20	19	0	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.974			0.999			0.984			0.889	
Flt Protected	0.950			0.950				0.958			0.991	
Satd. Flow (prot)	1789	4403	0	1789	4516	0	0	1775	0	0	1659	0
Flt Permitted	0.057			0.169				0.604			0.943	
Satd. Flow (perm)	107	4403	0	318	4516	0	0	1119	0	0	1579	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53			1			23			23	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	1012	213	18	1970	9	144	0	20	19	0	88
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	1225	0	18	1979	0	0	164	0	0	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	97.0	97.0		97.0	97.0		43.0	43.0		43.0	43.0	
Total Split (%)	69.3%	69.3%		69.3%	69.3%		30.7%	30.7%		30.7%	30.7%	
Maximum Green (s)	91.0	91.0		91.0	91.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	106.2	106.2		106.2	106.2			21.8			21.8	
Actuated g/C Ratio	0.76	0.76		0.76	0.76			0.16			0.16	
v/c Ratio	0.37	0.37		0.07	0.58			0.85			0.40	
Control Delay (s/veh)	29.1	7.8		5.3	7.2			82.7			44.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	29.1	7.8		5.3	7.2			82.7			44.1	
LOS	C	A		A	A			F			D	
Approach Delay (s/veh)		8.3			7.2			82.7			44.1	
Approach LOS		A			A			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	30	1225	18	1979	164	107
v/c Ratio	0.37	0.37	0.07	0.58	0.85	0.40
Control Delay (s/veh)	29.1	7.8	5.3	7.2	82.7	44.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.1	7.8	5.3	7.2	82.7	44.1
Queue Length 50th (m)	4.9	80.1	1.1	82.7	39.4	21.4
Queue Length 95th (m)	11.5	37.4	m1.6	129.9	61.8	37.0
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	81	3351	241	3424	312	434
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.37	0.07	0.58	0.53	0.25

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1012	213	18	1970	9	144	0	20	19	0	88
Future Volume (vph)	30	1012	213	18	1970	9	144	0	20	19	0	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.97		1.00	1.00			0.98			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4402		1789	4517			1775			1660	
Flt Permitted	0.06	1.00		0.17	1.00			0.60			0.94	
Satd. Flow (perm)	107	4402		318	4517			1119			1578	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	1012	213	18	1970	9	144	0	20	19	0	88
RTOR Reduction (vph)	0	13	0	0	0	0	0	19	0	0	19	0
Lane Group Flow (vph)	30	1212	0	18	1979	0	0	145	0	0	88	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	106.2	106.2		106.2	106.2			21.8			21.8	
Effective Green, g (s)	106.2	106.2		106.2	106.2			21.8			21.8	
Actuated g/C Ratio	0.76	0.76		0.76	0.76			0.16			0.16	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	81	3339		241	3426			174			245	
v/s Ratio Prot		0.28			c0.44							
v/s Ratio Perm	0.28			0.06				c0.13			0.06	
v/c Ratio	0.37	0.36		0.07	0.58			0.83			0.36	
Uniform Delay, d1	5.7	5.6		4.3	7.3			57.3			52.8	
Progression Factor	1.47	1.25		0.77	0.80			1.00			1.00	
Incremental Delay, d2	12.2	0.3		0.5	0.6			27.3			0.9	
Delay (s)	20.6	7.3		3.9	6.5			84.6			53.7	
Level of Service	C	A		A	A			F			D	
Approach Delay (s/veh)		7.7			6.4			84.6			53.7	
Approach LOS		A			A			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↱		↱
Traffic Volume (vph)	0	1125	2580	19	0	22
Future Volume (vph)	0	1125	2580	19	0	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	*0.80	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	5142	3014	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	5142	3014	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1125	2580	19	0	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1125	2580	19	0	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 81.3%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↱		↱
Traffic Volume (veh/h)	0	1125	2580	19	0	22
Future Volume (Veh/h)	0	1125	2580	19	0	22
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1125	2580	19	0	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.64				0.67	0.64
vC, conflicting volume	2599				2955	1290
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2371				2386	316
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	95
cM capacity (veh/h)	129				19	433

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	375	375	375	1290	1290	19	22
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	19	22
cSH	1700	1700	1700	1700	1700	1700	433
Volume to Capacity	0.22	0.22	0.22	0.76	0.76	0.01	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Lane LOS							B
Approach Delay (s/veh)	0.0			0.0			13.8
Approach LOS							B

Intersection Summary				
Average Delay		0.1		
Intersection Capacity Utilization		81.3%	ICU Level of Service	D
Analysis Period (min)		15		

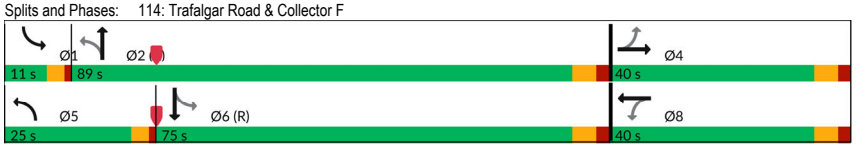
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	39	31	31	36	42	47	1272	129	89	1784	51
Future Volume (vph)	19	39	31	31	36	42	47	1272	129	89	1784	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.934			0.919			0.986			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1682	0	1652	1655	0	1711	4359	0	1711	4403	0
Flt Permitted	0.706			0.711			0.073			0.129		
Satd. Flow (perm)	1227	1682	0	1236	1655	0	131	4359	0	232	4403	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			40			18			4	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	39	31	31	36	42	47	1272	129	89	1784	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	70	0	31	78	0	47	1401	0	89	1835	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	10.9	10.9		10.9	10.9		114.0	105.0		117.0	108.3	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.81	0.75		0.84	0.77	
v/c Ratio	0.20	0.45		0.32	0.47		0.25	0.43		0.32	0.54	
Control Delay (s/veh)	64.6	48.1		71.3	43.3		11.2	0.9		5.8	4.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	64.6	48.1		71.3	43.3		11.2	0.9		5.8	4.9	
LOS	E	D		E	D		B	A		A	A	
Approach Delay (s/veh)		51.6			51.2			1.3			4.9	
Approach LOS		D			D			A			A	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.54		
Intersection Signal Delay (s/veh): 6.0	Intersection LOS: A	
Intersection Capacity Utilization 63.2%	ICU Level of Service B	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	19	70	31	78	47	1401	89	1835
v/c Ratio	0.20	0.45	0.32	0.47	0.25	0.43	0.32	0.54
Control Delay (s/veh)	64.6	48.1	71.3	43.3	11.2	0.9	5.8	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.6	48.1	71.3	43.3	11.2	0.9	5.8	4.9
Queue Length 50th (m)	5.0	11.2	8.6	10.4	0.2	3.5	1.3	21.0
Queue Length 95th (m)	m12.9	m27.6	m18.7	m26.6	m0.2	m12.0	13.6	73.1
Internal Link Dist (m)		200.2		176.3		308.8		241.5
Turn Bay Length (m)	60.0		50.0		50.0		70.0	
Base Capacity (vph)	297	428	300	432	348	3274	278	3406
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.16	0.10	0.18	0.14	0.43	0.32	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	39	31	31	36	42	47	1272	129	89	1784	51
Future Volume (vph)	19	39	31	31	36	42	47	1272	129	89	1784	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.93		1.00	0.92		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1681		1652	1655		1711	4360		1711	4402	
Flt Permitted	0.71	1.00		0.71	1.00		0.07	1.00		0.13	1.00	
Satd. Flow (perm)	1228	1681		1237	1655		132	4360		232	4402	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	39	31	31	36	42	47	1272	129	89	1784	51
RTOR Reduction (vph)	0	25	0	0	37	0	0	5	0	0	1	0
Lane Group Flow (vph)	19	45	0	31	41	0	47	1397	0	89	1834	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	10.9	10.9		10.9	10.9		110.6	105.0		115.6	107.5	
Effective Green, g (s)	10.9	10.9		10.9	10.9		110.6	105.0		115.6	107.5	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.79	0.75		0.83	0.77	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	95	130		96	128		167	3270		277	3380	
v/s Ratio Prot		c0.03			0.02		0.01	0.32		c0.02	c0.42	
v/s Ratio Perm	0.02			0.03			0.21			0.25		
v/c Ratio	0.20	0.35		0.32	0.32		0.28	0.43		0.32	0.54	
Uniform Delay, d1	60.5	61.2		61.1	61.1		4.4	6.4		3.2	6.5	
Progression Factor	0.99	0.98		1.02	1.03		4.44	0.11		1.80	0.66	
Incremental Delay, d2	1.0	1.6		2.0	1.5		0.5	0.2		0.6	0.5	
Delay (s)	61.2	61.8		64.5	64.5		20.1	0.9		6.3	4.8	
Level of Service	E	E		E	E		C	A		A	A	
Approach Delay (s/veh)		61.7			64.5			1.5			4.9	
Approach LOS		E			E			A			A	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	6.8	HCM 2000 Level of Service		A	
HCM 2000 Volume to Capacity ratio	0.52				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	63.2%	ICU Level of Service		B	
Analysis Period (min)	15				

c Critical Lane Group

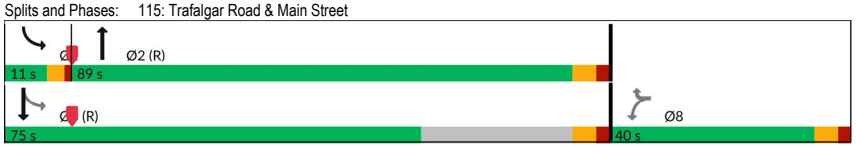
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	145	37	1314	42	16	1574
Future Volume (vph)	145	37	1314	42	16	1574
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	90.0	0.0		0.0	50.0	
Storage Lanes	0	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.995			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4399	0	1711	4421
Flt Permitted	0.950				0.135	
Satd. Flow (perm)	1789	1601	4399	0	243	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		37	5			
Link Speed (k/h)	48		60			60
Link Distance (m)	627.0		712.8			236.3
Travel Time (s)	47.0		42.8			14.2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	145	37	1314	42	16	1574
Shared Lane Traffic (%)						
Lane Group Flow (vph)	145	37	1356	0	16	1574
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	8	8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		7.0	20.0
Minimum Split (s)	40.0	40.0	26.0		11.0	26.0
Total Split (s)	40.0	40.0	89.0		11.0	75.0
Total Split (%)	28.6%	28.6%	63.6%		7.9%	53.6%
Maximum Green (s)	34.0	34.0	83.0		7.0	69.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Don't Walk (s)	27.0	27.0	11.0			11.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	16.7	16.7	106.9		113.3	111.3
Actuated g/C Ratio	0.12	0.12	0.76		0.81	0.80
v/c Ratio	0.68	0.17	0.40		0.06	0.45
Control Delay (s/veh)	74.5	16.8	18.4		2.4	3.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	74.5	16.8	18.4		2.4	3.5
LOS	E	B	B		A	A
Approach Delay (s/veh)	62.8		18.4			3.5
Approach LOS	E		B			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	145	37	1356	16	1574
v/c Ratio	0.68	0.17	0.40	0.06	0.45
Control Delay (s/veh)	74.5	16.8	18.4	2.4	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.5	16.8	18.4	2.4	3.5
Queue Length 50th (m)	39.7	0.0	104.7	0.5	28.5
Queue Length 95th (m)	60.2	10.3	138.5	m0.9	20.8
Internal Link Dist (m)	603.0		688.8		212.3
Turn Bay Length (m)	90.0			50.0	
Base Capacity (vph)	434	416	3360	270	3514
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.33	0.09	0.40	0.06	0.45

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	145	37	1314	42	16	1574
Future Volume (vph)	145	37	1314	42	16	1574
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4400		1711	4421
Flt Permitted	0.95	1.00	1.00		0.13	1.00
Satd. Flow (perm)	1789	1601	4400		242	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	145	37	1314	42	16	1574
RTOR Reduction (vph)	0	33	1	0	0	0
Lane Group Flow (vph)	145	4	1355	0	16	1574
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			2		1	6
Permitted Phases	8	8			6	
Actuated Green, G (s)	16.7	16.7	104.5		111.3	111.3
Effective Green, g (s)	16.7	16.7	104.5		111.3	111.3
Actuated g/C Ratio	0.12	0.12	0.75		0.80	0.80
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	213	190	3284		221	3514
v/s Ratio Prot			0.31		0.00	c0.36
v/s Ratio Perm	c0.08	0.00			0.06	
v/c Ratio	0.68	0.02	0.41		0.07	0.45
Uniform Delay, d1	59.1	54.4	6.5		3.7	4.6
Progression Factor	1.00	1.00	2.71		0.60	0.64
Incremental Delay, d2	8.6	0.0	0.4		0.1	0.4
Delay (s)	67.7	54.5	18.0		2.4	3.3
Level of Service	E	D	B		A	A
Approach Delay (s/veh)	65.0		18.0			3.3
Approach LOS	E		B			A

Intersection Summary				
HCM 2000 Control Delay (s/veh)	13.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

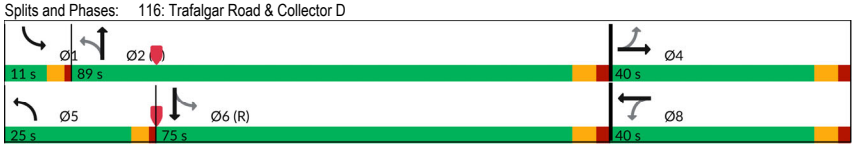
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	18	65	163	21	163	101	1192	41	82	1656	103
Future Volume (vph)	45	18	65	163	21	163	101	1192	41	82	1656	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		0.0	100.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.883			0.867			0.995			0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1590	0	1652	1561	0	1711	4399	0	1711	4381	0
Flt Permitted	0.448			0.703			0.064			0.158		
Satd. Flow (perm)	779	1590	0	1222	1561	0	115	4399	0	285	4381	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		65			158			5			8	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	45	18	65	163	21	163	101	1192	41	82	1656	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	45	83	0	163	184	0	101	1233	0	82	1759	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	23.9	23.9		23.9	23.9		103.6	92.7		100.2	90.8	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.74	0.66		0.72	0.65	
v/c Ratio	0.34	0.26		0.78	0.46		0.53	0.42		0.29	0.62	
Control Delay (s/veh)	55.6	16.7		79.4	13.9		44.0	3.4		7.6	14.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	55.6	16.7		79.4	13.9		44.0	3.4		7.6	14.5	
LOS	E	B		E	B		D	A		A	B	
Approach Delay (s/veh)		30.3			44.7			6.5			14.2	
Approach LOS		C			D			A			B	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 90		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.78		
Intersection Signal Delay (s/veh): 14.9		Intersection LOS: B
Intersection Capacity Utilization 78.0%		ICU Level of Service D
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	45	83	163	184	101	1233	82	1759
v/c Ratio	0.34	0.26	0.78	0.46	0.53	0.42	0.29	0.62
Control Delay (s/veh)	55.6	16.7	79.4	13.9	44.0	3.4	7.6	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.6	16.7	79.4	13.9	44.0	3.4	7.6	14.5
Queue Length 50th (m)	11.3	4.3	44.4	6.2	11.4	11.2	3.8	128.0
Queue Length 95th (m)	22.3	17.8	65.3	26.1	24.9	55.3	6.6	181.4
Internal Link Dist (m)		84.9		331.4		200.5		688.8
Turn Bay Length (m)	50.0		80.0		50.0		100.0	
Base Capacity (vph)	189	435	296	498	326	2914	279	2844
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.19	0.55	0.37	0.31	0.42	0.29	0.62

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	18	65	163	21	163	101	1192	41	82	1656	103
Future Volume (vph)	45	18	65	163	21	163	101	1192	41	82	1656	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.88		1.00	0.87		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1589		1652	1561		1711	4399		1711	4382	
Flt Permitted	0.45	1.00		0.70	1.00		0.06	1.00		0.16	1.00	
Satd. Flow (perm)	778	1589		1222	1561		116	4399		285	4382	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	45	18	65	163	21	163	101	1192	41	82	1656	103
RTOR Reduction (vph)	0	54	0	0	131	0	0	2	0	0	3	0
Lane Group Flow (vph)	45	29	0	163	53	0	101	1231	0	82	1756	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	23.9	23.9		23.9	23.9		102.0	92.7		98.2	90.8	
Effective Green, g (s)	23.9	23.9		23.9	23.9		102.0	92.7		98.2	90.8	
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.73	0.66		0.70	0.65	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	132	271		208	266		190	2912		275	2842	
v/s Ratio Prot		0.02			0.03		c0.04	0.28		0.02	c0.40	
v/s Ratio Perm	0.06			c0.13			0.35			0.19		
v/c Ratio	0.34	0.11		0.78	0.20		0.53	0.42		0.30	0.62	
Uniform Delay, d1	51.1	49.0		55.6	49.8		13.2	11.1		7.1	14.4	
Progression Factor	1.00	1.00		1.00	1.00		2.72	0.25		0.90	0.85	
Incremental Delay, d2	1.5	0.2		17.3	0.4		2.7	0.4		0.6	0.9	
Delay (s)	52.7	49.2		72.9	50.2		38.6	3.2		7.0	13.2	
Level of Service	D	D		E	D		D	A		A	B	
Approach Delay (s/veh)		50.4			60.9			5.9			13.0	
Approach LOS		D			E			A			B	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.64			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	78.0%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

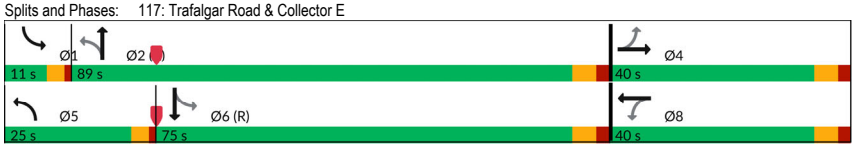
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	5	2	74	5	41	19	1289	25	30	1841	13
Future Volume (vph)	4	5	2	74	5	41	19	1289	25	30	1841	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.957			0.866			0.997			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1802	0	1789	1631	0	1711	4408	0	1711	4416	0
Flt Permitted	0.727			0.753			0.069			0.149		
Satd. Flow (perm)	1369	1802	0	1418	1631	0	124	4408	0	268	4416	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			41			3			1	
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	5	2	74	5	41	19	1289	25	30	1841	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	4	7	0	74	46	0	19	1314	0	30	1854	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	13.2	13.2		13.2	13.2		114.1	108.2		114.7	108.5	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.82	0.77		0.82	0.78	
v/c Ratio	0.03	0.04		0.55	0.24		0.11	0.39		0.10	0.54	
Control Delay (s/veh)	56.3	48.7		75.5	21.4		1.5	1.5		3.0	5.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	56.3	48.7		75.5	21.4		1.5	1.5		3.0	5.4	
LOS	E	D		E	C		A	A		A	A	
Approach Delay (s/veh)		51.5			54.8			1.5			5.4	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 5.7		Intersection LOS: A	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	4	7	74	46	19	1314	30	1854
v/c Ratio	0.03	0.04	0.55	0.24	0.11	0.39	0.10	0.54
Control Delay (s/veh)	56.3	48.7	75.5	21.4	1.5	1.5	3.0	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.3	48.7	75.5	21.4	1.5	1.5	3.0	5.4
Queue Length 50th (m)	0.8	1.3	20.3	1.3	0.0	6.5	0.9	47.4
Queue Length 95th (m)	m4.0	m5.0	36.0	13.4	m0.5	8.8	m2.6	75.3
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	332	439	344	427	341	3406	291	3421
Starvation Cap Reductn	0	0	0	0	0	0	0	95
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.02	0.22	0.11	0.06	0.39	0.10	0.56

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	5	2	74	5	41	19	1289	25	30	1841	13
Future Volume (vph)	4	5	2	74	5	41	19	1289	25	30	1841	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.96		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1803		1789	1632		1711	4408		1711	4416	
Flt Permitted	0.73	1.00		0.75	1.00		0.07	1.00		0.15	1.00	
Satd. Flow (perm)	1369	1803		1418	1632		125	4408		269	4416	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	5	2	74	5	41	19	1289	25	30	1841	13
RTOR Reduction (vph)	0	2	0	0	37	0	0	1	0	0	0	0
Lane Group Flow (vph)	4	5	0	74	9	0	19	1313	0	30	1854	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.2	13.2		13.2	13.2		110.5	106.6		111.1	106.9	
Effective Green, g (s)	13.2	13.2		13.2	13.2		110.5	106.6		111.1	106.9	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.79	0.76		0.79	0.76	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	129	169		133	153		142	3356		256	3371	
v/s Ratio Prot		0.00			0.01		c0.00	0.30		0.00	c0.42	
v/s Ratio Perm	0.00			c0.05			0.10			0.09		
v/c Ratio	0.03	0.03		0.56	0.06		0.13	0.39		0.12	0.55	
Uniform Delay, d1	57.6	57.6		60.6	57.7		4.6	5.7		3.4	6.7	
Progression Factor	1.02	1.01		1.00	0.99		0.13	0.20		1.00	0.69	
Incremental Delay, d2	0.1	0.1		5.0	0.2		0.4	0.3		0.2	0.5	
Delay (s)	58.6	58.4		65.6	57.6		1.0	1.4		3.5	5.2	
Level of Service	E	E		E	E		A	A		A	A	
Approach Delay (s/veh)		58.5			62.5			1.4			5.1	
Approach LOS		E			E			A			A	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	5.9	HCM 2000 Level of Service	A	
HCM 2000 Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	56.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	14	45	0	0	137
Future Volume (vph)	44	14	45	0	0	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.963				
Satd. Flow (prot)	0	3446	3579	0	1629	0
Flt Permitted		0.963				
Satd. Flow (perm)	0	3446	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	44	14	45	0	0	137
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	58	45	0	137	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		0.0	0.0		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	14	45	0	0	137
Future Volume (Veh/h)	44	14	45	0	0	137
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	44	14	45	0	0	137
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	45				140	23
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	45				140	23
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				100	87
cM capacity (veh/h)	1561				815	1049

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	49	9	30	15	137
Volume Left	44	0	0	0	0
Volume Right	0	0	0	0	137
cSH	1561	1700	1700	1700	1049
Volume to Capacity	0.03	0.00*	0.02	0.00*	0.13
Queue Length 95th (m)	0.7	0.0	0.0	0.0	3.4
Control Delay (s/veh)	6.7	0.0	0.0	0.0	8.9
Lane LOS	A				A
Approach Delay (s/veh)	5.6		0.0		8.9
Approach LOS					A

Intersection Summary				
Average Delay		6.5		
Intersection Capacity Utilization		24.3%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	14	0	0	0	0	45
Future Volume (vph)	14	0	0	0	0	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			39.5	161.7	
Travel Time (s)	55.9			3.0	12.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	14	0	0	0	0	45
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	0	0	0	45
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	14	0	0	0	0	45
Future Volume (vph)	14	0	0	0	0	45
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	14	0	0	0	0	45

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	14	0	45
Volume Left (vph)	14	0	0
Volume Right (vph)	0	0	45
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	5.1	4.6	3.4
Degree Utilization, x	0.02	0.00	0.04
Capacity (veh/h)	693	786	1059
Control Delay (s/veh)	7.0	6.4	6.5
Approach Delay (s/veh)	7.0		6.5
Approach LOS	A		A

Intersection Summary				
Delay	6.6			
Level of Service	A			
Intersection Capacity Utilization	6.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	22	7	0	0	0
Future Volume (vph)	0	22	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	70	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	8.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	22	7	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	0	7	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	22	7	0	0	0
Future Volume (Veh/h)	0	22	7	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	22	7	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	14	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	14	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	1001	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	22	7	0
Volume Left	0	7	0
Volume Right	22	0	0
cSH	1085	1623	1700
Volume to Capacity	0.02	0.00*	0.00
Queue Length 95th (m)	0.5	0.1	0.0
Control Delay (s/veh)	8.4	7.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	7.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	8.1		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

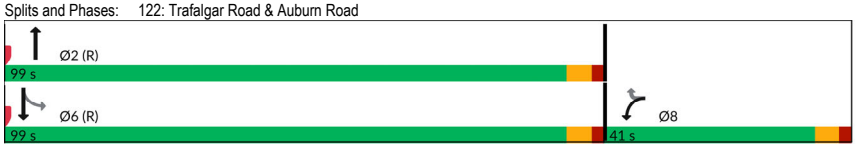
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	95	1381	28	44	1569
Future Volume (vph)	48	95	1381	28	44	1569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4408	0	1711	4421
Flt Permitted	0.950				0.139	
Satd. Flow (perm)	1789	1601	4408	0	250	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		68	4			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	48	95	1381	28	44	1569
Shared Lane Traffic (%)						
Lane Group Flow (vph)	48	95	1409	0	44	1569
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		20.0	20.0
Minimum Split (s)	40.0	40.0	40.0		40.0	40.0
Total Split (s)	41.0	41.0	99.0		99.0	99.0
Total Split (%)	29.3%	29.3%	70.7%		70.7%	70.7%
Maximum Green (s)	35.0	35.0	93.0		93.0	93.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Don't Walk (s)	9.0	9.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	10.8	10.8	117.2		117.2	117.2
Actuated g/C Ratio	0.08	0.08	0.84		0.84	0.84
v/c Ratio	0.35	0.51	0.38		0.21	0.42
Control Delay (s/veh)	68.1	31.7	4.3		5.0	3.3
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	68.1	31.7	4.3		5.0	3.3
LOS	E	C	A		A	A
Approach Delay (s/veh)	43.9		4.3			3.4
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay (s/veh): 5.6		Intersection LOS: A	
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	48	95	1409	44	1569
v/c Ratio	0.35	0.51	0.38	0.21	0.42
Control Delay (s/veh)	68.1	31.7	4.3	5.0	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.1	31.7	4.3	5.0	3.3
Queue Length 50th (m)	13.1	7.3	32.0	1.8	34.8
Queue Length 95th (m)	25.9	24.8	32.4	5.8	48.7
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	447	451	3689	209	3700
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.11	0.21	0.38	0.21	0.42

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	95	1381	28	44	1569
Future Volume (vph)	48	95	1381	28	44	1569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4408		1711	4421
Flt Permitted	0.95	1.00	1.00		0.14	1.00
Satd. Flow (perm)	1789	1601	4408		250	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	48	95	1381	28	44	1569
RTOR Reduction (vph)	0	63	1	0	0	0
Lane Group Flow (vph)	48	32	1408	0	44	1569
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases		8			6	
Actuated Green, G (s)	10.8	10.8	117.2		117.2	117.2
Effective Green, g (s)	10.8	10.8	117.2		117.2	117.2
Actuated g/C Ratio	0.08	0.08	0.84		0.84	0.84
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	138	123	3690		209	3701
v/s Ratio Prot	c0.03		0.32			c0.35
v/s Ratio Perm		0.02			0.18	
v/c Ratio	0.35	0.26	0.38		0.21	0.42
Uniform Delay, d1	61.3	60.8	2.7		2.3	2.9
Progression Factor	1.00	1.00	1.42		1.00	1.00
Incremental Delay, d2	1.5	1.1	0.3		2.3	0.4
Delay (s)	62.8	62.0	4.2		4.5	3.2
Level of Service	E	E	A		A	A
Approach Delay (s/veh)	62.3		4.2			3.3
Approach LOS	E		A			A

Intersection Summary				
HCM 2000 Control Delay (s/veh)	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	23	7	7	22	0
Future Volume (vph)	0	23	7	7	22	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.976		
Satd. Flow (prot)	1629	0	0	1838	1883	0
Flt Permitted				0.976		
Satd. Flow (perm)	1629	0	0	1838	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	23	7	7	22	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	0	14	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	23	7	7	22	0
Future Volume (Veh/h)	0	23	7	7	22	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	23	7	7	22	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	43	22	22			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	43	22	22			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	964	1055	1593			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	23	14	22
Volume Left	0	7	0
Volume Right	23	0	0
cSH	1055	1593	1700
Volume to Capacity	0.02	0.00*	0.01
Queue Length 95th (m)	0.5	0.1	0.0
Control Delay (s/veh)	8.5	3.7	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	3.7	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.2		
Intersection Capacity Utilization	16.6%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	13	53	22	45	15	24
Future Volume (vph)	13	53	22	45	15	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.892		0.909			
Flt Protected	0.990					0.981
Satd. Flow (prot)	1590	0	1637	0	0	1766
Flt Permitted	0.990					0.981
Satd. Flow (perm)	1590	0	1637	0	0	1766
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	53	22	45	15	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	66	0	67	0	0	39
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	53	22	45	15	24
Future Volume (Veh/h)	13	53	22	45	15	24
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	13	53	22	45	15	24
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	99	45			67	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	99	45			67	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	95			99	
cM capacity (veh/h)	892	1025			1535	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	66	67	39
Volume Left	13	0	15
Volume Right	53	45	0
cSH	996	1700	1535
Volume to Capacity	0.07	0.04	0.00*
Queue Length 95th (m)	1.6	0.0	0.2
Control Delay (s/veh)	8.9	0.0	2.9
Lane LOS	A		A
Approach Delay (s/veh)	8.9	0.0	2.9
Approach LOS	A		

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	63	11	61	120	3	17	18	47	25	4	0
Future Volume (vph)	0	63	11	61	120	3	17	18	47	25	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.980			0.998			0.923				
Flt Protected					0.984			0.990			0.959	
Satd. Flow (prot)	0	1846	0	0	1768	0	0	1721	0	0	1806	0
Flt Permitted					0.984			0.990			0.959	
Satd. Flow (perm)	0	1846	0	0	1768	0	0	1721	0	0	1806	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	63	11	61	120	3	17	18	47	25	4	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	74	0	0	184	0	0	82	0	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	28.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	63	11	61	120	3	17	18	47	25	4	0
Future Volume (Veh/h)	0	63	11	61	120	3	17	18	47	25	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	63	11	61	120	3	17	18	47	25	4	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	123			74			314	314	69	368	318	122
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	123			74			314	314	69	368	318	122
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			97	97	95	95	99	100
cM capacity (veh/h)	1464			1526			616	578	995	531	575	930

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	74	184	82	29
Volume Left	0	61	17	25
Volume Right	11	3	47	0
cSH	1464	1526	773	536
Volume to Capacity	0.00	0.04	0.11	0.05
Queue Length 95th (m)	0.0	0.9	2.7	1.3
Control Delay (s/veh)	0.0	2.7	10.2	12.1
Lane LOS		A	B	B
Approach Delay (s/veh)	0.0	2.7	10.2	12.1
Approach LOS			B	B

Intersection Summary				
Average Delay	4.6			
Intersection Capacity Utilization	28.4%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	57	60	20	204	58	29
Future Volume (vph)	57	60	20	204	58	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.931				0.955	
Flt Protected				0.996	0.968	
Satd. Flow (prot)	1753	0	0	1876	1741	0
Flt Permitted				0.996	0.968	
Satd. Flow (perm)	1753	0	0	1876	1741	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	57	60	20	204	58	29
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	0	224	87	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		97	97		97	97
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	3	64	9	1	36
Future Volume (vph)	3	3	64	9	1	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932		0.983			
Flt Protected	0.976					0.999
Satd. Flow (prot)	1581	0	1770	0	0	1799
Flt Permitted	0.976					0.999
Satd. Flow (perm)	1581	0	1770	0	0	1799
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	3	3	64	9	1	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	6	0	73	0	0	37
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 13.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	3	64	9	1	36
Future Volume (Veh/h)	3	3	64	9	1	36
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	3	64	9	1	36
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	107	69			73	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	107	69			73	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	891	995			1527	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	6	73	37
Volume Left	3	0	1
Volume Right	3	9	0
cSH	940	1700	1527
Volume to Capacity	0.00*	0.04	0.00*
Queue Length 95th (m)	0.1	0.0	0.0
Control Delay (s/veh)	8.9	0.0	0.2
Lane LOS	A		A
Approach Delay (s/veh)	8.9	0.0	0.2
Approach LOS	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	13.9%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	7	6	6	21	13	8	67	7	9	65	2
Future Volume (vph)	2	7	6	6	21	13	8	67	7	9	65	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.946			0.956			0.988			0.996	
Flt Protected		0.993			0.993			0.995			0.994	
Satd. Flow (prot)	0	1633	0	0	1650	0	0	1770	0	0	1783	0
Flt Permitted		0.993			0.993			0.995			0.994	
Satd. Flow (perm)	0	1633	0	0	1650	0	0	1770	0	0	1783	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	2	7	6	6	21	13	8	67	7	9	65	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	15	0	0	40	0	0	82	0	0	76	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	7	6	6	21	13	8	67	7	9	65	2
Future Volume (Veh/h)	2	7	6	6	21	13	8	67	7	9	65	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	7	6	6	21	13	8	67	7	9	65	2
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	194	174	66	180	172	71	67			74		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	194	174	66	180	172	71	67			74		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	99	99	99	97	99	99			99		
cM capacity (veh/h)	732	711	998	765	714	992	1535			1526		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	15	40	82	76
Volume Left	2	6	8	9
Volume Right	6	13	7	2
cSH	807	794	1535	1526
Volume to Capacity	0.02	0.05	0.00*	0.00*
Queue Length 95th (m)	0.4	1.2	0.1	0.1
Control Delay (s/veh)	9.5	9.8	0.8	0.9
Lane LOS	A	A	A	A
Approach Delay (s/veh)	9.5	9.8	0.8	0.9
Approach LOS	A	A		

Intersection Summary				
Average Delay		3.1		
Intersection Capacity Utilization		15.7%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	18	11	0	36	0	63	107	8	0	103	12
Future Volume (vph)	6	18	11	0	36	0	63	107	8	0	103	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.958						0.994			0.986	
Flt Protected		0.992						0.983				
Satd. Flow (prot)	0	1790	0	0	1883	0	0	1759	0	0	1775	0
Flt Permitted		0.992						0.983				
Satd. Flow (perm)	0	1790	0	0	1883	0	0	1759	0	0	1775	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	6	18	11	0	36	0	63	107	8	0	103	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	35	0	0	36	0	0	178	0	0	115	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	97		97	24		97	97		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	29.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	18	11	0	36	0	63	107	8	0	103	12
Future Volume (Veh/h)	6	18	11	0	36	0	63	107	8	0	103	12
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	18	11	0	36	0	63	107	8	0	103	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	364	350	109	366	352	111	115			115		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	364	350	109	366	352	111	115			115		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	97	99	100	93	100	96			100		
cM capacity (veh/h)	544	550	945	550	548	942	1474			1474		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	35	36	178	115
Volume Left	6	0	63	0
Volume Right	11	0	8	12
cSH	632	548	1474	1474
Volume to Capacity	0.06	0.07	0.04	0.00
Queue Length 95th (m)	1.3	1.6	1.0	0.0
Control Delay (s/veh)	11.0	12.0	2.9	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	11.0	12.0	2.9	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay		3.7		
Intersection Capacity Utilization	29.9%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	32	2	1	32	6	3	47	15	5	17	17
Future Volume (vph)	20	32	2	1	32	6	3	47	15	5	17	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.979			0.969			0.941	
Flt Protected		0.982			0.999			0.998			0.994	
Satd. Flow (prot)	0	1699	0	0	1761	0	0	1741	0	0	1684	0
Flt Permitted		0.982			0.999			0.998			0.994	
Satd. Flow (perm)	0	1699	0	0	1761	0	0	1741	0	0	1684	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	32	2	1	32	6	3	47	15	5	17	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	54	0	0	39	0	0	65	0	0	39	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	32	2	1	32	6	3	47	15	5	17	17
Future Volume (Veh/h)	20	32	2	1	32	6	3	47	15	5	17	17
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	32	2	1	32	6	3	47	15	5	17	17
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	118	104	26	114	105	55	34			62		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	118	104	26	114	105	55	34			62		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	96	100	100	96	99	100			100		
cM capacity (veh/h)	823	783	1050	831	782	1012	1578			1541		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	54	39	65	39
Volume Left	20	1	3	5
Volume Right	2	6	15	17
cSH	805	811	1578	1541
Volume to Capacity	0.07	0.05	0.00*	0.00*
Queue Length 95th (m)	1.6	1.1	0.0	0.1
Control Delay (s/veh)	9.8	9.7	0.4	1.0
Lane LOS	A	A	A	A
Approach Delay (s/veh)	9.8	9.7	0.4	1.0
Approach LOS	A	A		

Intersection Summary				
Average Delay		4.9		
Intersection Capacity Utilization		20.2%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	54	0	7	52	65	4	13	2	58	15	4
Future Volume (vph)	4	54	0	7	52	65	4	13	2	58	15	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.929			0.986			0.993	
Flt Protected		0.997			0.997			0.990			0.964	
Satd. Flow (prot)	0	1795	0	0	1668	0	0	1758	0	0	1724	0
Flt Permitted		0.997			0.997			0.990			0.964	
Satd. Flow (perm)	0	1795	0	0	1668	0	0	1758	0	0	1724	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	54	0	7	52	65	4	13	2	58	15	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	58	0	0	124	0	0	19	0	0	77	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	54	0	7	52	65	4	13	2	58	15	4
Future Volume (Veh/h)	4	54	0	7	52	65	4	13	2	58	15	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	54	0	7	52	65	4	13	2	58	15	4
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	117			54			172	193	54	169	161	85
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	117			54			172	193	54	169	161	85
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	98	100	93	98	100
cM capacity (veh/h)	1471			1551			771	697	1013	778	726	975

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	58	124	19	77
Volume Left	4	7	4	58
Volume Right	0	65	2	4
cSH	1471	1551	736	775
Volume to Capacity	0.00*	0.00*	0.03	0.10
Queue Length 95th (m)	0.1	0.1	0.6	2.5
Control Delay (s/veh)	0.5	0.4	10.0	10.2
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.5	0.4	10.0	10.2
Approach LOS			B	B

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization		26.4%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	128	35	35	68	70	75
Future Volume (vph)	128	35	35	68	70	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.971				0.930	
Flt Protected	0.962			0.983		
Satd. Flow (prot)	1682	0	0	1770	1675	0
Flt Permitted	0.962			0.983		
Satd. Flow (perm)	1682	0	0	1770	1675	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	128	35	35	68	70	75
Shared Lane Traffic (%)						
Lane Group Flow (vph)	163	0	0	103	145	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	128	35	35	68	70	75
Future Volume (Veh/h)	128	35	35	68	70	75
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	128	35	35	68	70	75
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	246	108	145			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	246	108	145			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	82	96	98			
cM capacity (veh/h)	725	946	1437			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	163	103	145
Volume Left	128	35	0
Volume Right	35	0	75
cSH	763	1437	1700
Volume to Capacity	0.21	0.02	0.09
Queue Length 95th (m)	6.1	0.6	0.0
Control Delay (s/veh)	11.0	2.7	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	11.0	2.7	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	16	12	5	12	0
Future Volume (vph)	0	16	12	5	12	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.966		
Satd. Flow (prot)	1629	0	0	1819	1883	0
Flt Permitted				0.966		
Satd. Flow (perm)	1629	0	0	1819	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	378.1	
Travel Time (s)	16.7			24.3	19.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	16	12	5	12	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	17	12	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	16	12	5	12	0
Future Volume (Veh/h)	0	16	12	5	12	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	16	12	5	12	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	41	12	12			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	41	12	12			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	99			
cM capacity (veh/h)	963	1069	1607			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	16	17	12
Volume Left	0	12	0
Volume Right	16	0	0
cSH	1069	1607	1700
Volume to Capacity	0.01	0.00*	0.00*
Queue Length 95th (m)	0.3	0.2	0.0
Control Delay (s/veh)	8.4	5.1	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	5.1	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.9		
Intersection Capacity Utilization	17.6%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	25	29	0	24	13	8
Future Volume (vph)	25	29	0	24	13	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.927				0.949	
Flt Protected					0.970	
Satd. Flow (prot)	1669	0	0	1801	1658	0
Flt Permitted					0.970	
Satd. Flow (perm)	1669	0	0	1801	1658	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	25	29	0	24	13	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	54	0	0	24	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	25	29	0	24	13	8
Future Volume (Veh/h)	25	29	0	24	13	8
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	25	29	0	24	13	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	34	0	72	30	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	34	0	72	30	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	97	97	100	97	99	
cM capacity (veh/h)	852	1085	870	856	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	54	24	21
Volume Left	0	0	13
Volume Right	29	0	8
cSH	963	856	1623
Volume to Capacity	0.06	0.03	0.00*
Queue Length 95th (m)	1.4	0.7	0.2
Control Delay (s/veh)	9.0	9.3	4.5
Lane LOS	A	A	A
Approach Delay (s/veh)	9.0	9.3	4.5
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.1		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

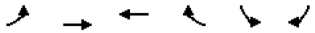
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	20	27	48	19	2
Future Volume (vph)	2	20	27	48	19	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.877				0.987	
Flt Protected	0.995			0.982		
Satd. Flow (prot)	1517	0	0	1768	1777	0
Flt Permitted	0.995			0.982		
Satd. Flow (perm)	1517	0	0	1768	1777	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	2	20	27	48	19	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	0	75	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	20	27	48	19	2
Future Volume (Veh/h)	2	20	27	48	19	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	20	27	48	19	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	122	20	21			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	122	20	21			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	98			
cM capacity (veh/h)	858	1058	1595			

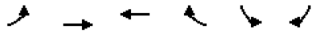
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	22	75	21
Volume Left	2	27	0
Volume Right	20	0	2
cSH	1036	1595	1700
Volume to Capacity	0.02	0.02	0.01
Queue Length 95th (m)	0.5	0.4	0.0
Control Delay (s/veh)	8.6	2.7	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.6	2.7	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	20.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	24	79	156	69	50	60
Future Volume (vph)	24	79	156	69	50	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.959		0.926	
Flt Protected		0.988			0.978	
Satd. Flow (prot)	0	1779	1727	0	1574	0
Flt Permitted		0.988			0.978	
Satd. Flow (perm)	0	1779	1727	0	1574	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	24	79	156	69	50	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	103	225	0	110	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	24	79	156	69	50	60
Future Volume (Veh/h)	24	79	156	69	50	60
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	24	79	156	69	50	60
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.99				0.99	0.99
vC, conflicting volume	225				318	191
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	216				309	181
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				92	93
cM capacity (veh/h)	1344				666	855

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	103	225	110
Volume Left	24	0	50
Volume Right	0	69	60
cSH	1344	1700	758
Volume to Capacity	0.02	0.13	0.15
Queue Length 95th (m)	0.4	0.0	3.8
Control Delay (s/veh)	1.9	0.0	10.6
Lane LOS	A		B
Approach Delay (s/veh)	1.9	0.0	10.6
Approach LOS			B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	34.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	21	22	9	98	6	10
Future Volume (vph)	21	22	9	98	6	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.931				0.916	
Flt Protected				0.996	0.982	
Satd. Flow (prot)	1619	0	0	1732	1620	0
Flt Permitted				0.996	0.982	
Satd. Flow (perm)	1619	0	0	1732	1620	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	21	22	9	98	6	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	43	0	0	107	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	21	22	9	98	6	10
Future Volume (Veh/h)	21	22	9	98	6	10
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	22	9	98	6	10
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	22	0	50	17	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	22	0	50	17	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	98	98	99	89	100	
cM capacity (veh/h)	868	1085	911	874	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	43	107	16
Volume Left	0	9	6
Volume Right	22	0	10
cSH	967	877	1623
Volume to Capacity	0.04	0.12	0.00*
Queue Length 95th (m)	1.1	3.2	0.1
Control Delay (s/veh)	8.9	9.7	2.7
Lane LOS	A	A	A
Approach Delay (s/veh)	8.9	9.7	2.7
Approach LOS	A	A	

Intersection Summary				
Average Delay		8.8		
Intersection Capacity Utilization		22.3%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	63	166	90	17	3	84	6	97	3	6	8
Future Volume (vph)	28	63	166	90	17	3	84	6	97	3	6	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.913			0.996			0.930			0.936	
Flt Protected		0.995			0.961			0.978			0.991	
Satd. Flow (prot)	0	1636	0	0	1724	0	0	1638	0	0	1670	0
Flt Permitted		0.995			0.961			0.978			0.991	
Satd. Flow (perm)	0	1636	0	0	1724	0	0	1638	0	0	1670	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	28	63	166	90	17	3	84	6	97	3	6	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	257	0	0	110	0	0	187	0	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	63	166	90	17	3	84	6	97	3	6	8
Future Volume (Veh/h)	28	63	166	90	17	3	84	6	97	3	6	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	28	63	166	90	17	3	84	6	97	3	6	8
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked												
vC, conflicting volume	20			229			412	402	146	501	484	19
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	20			229			412	402	146	501	484	19
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			93			83	99	89	99	99	99
cM capacity (veh/h)	1596			1339			506	492	901	398	443	1060

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	257	110	187	17
Volume Left	28	90	84	3
Volume Right	166	3	97	8
cSH	1596	1339	655	594
Volume to Capacity	0.02	0.07	0.29	0.03
Queue Length 95th (m)	0.4	1.6	8.9	0.7
Control Delay (s/veh)	0.9	6.5	12.7	11.2
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.9	6.5	12.7	11.2
Approach LOS			B	B

Intersection Summary			
Average Delay	6.2		
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	6	65	20	0
Future Volume (vph)	0	0	6	65	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected				0.996		
Satd. Flow (prot)	1739	0	0	1793	1801	0
Flt Permitted				0.996		
Satd. Flow (perm)	1739	0	0	1793	1801	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	6	65	20	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	71	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 11.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	6	65	20	0
Future Volume (Veh/h)	0	0	6	65	20	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	6	65	20	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	97	20	20			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	97	20	20			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	899	1058	1596			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	0	71	20
Volume Left	0	6	0
Volume Right	0	0	0
cSH	1700	1596	1700
Volume to Capacity	0.00	0.00*	0.01
Queue Length 95th (m)	0.0	0.1	0.0
Control Delay (s/veh)	0.0	0.6	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	0.0	0.6	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	11.7%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	41	41	0	0	13	18	13	0	55	0
Future Volume (vph)	0	0	41	41	0	0	13	18	13	0	55	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.960				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	41	41	0	0	13	18	13	0	55	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	41	0	0	41	0	0	44	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	41	41	0	0	13	18	13	0	55	0
Future Volume (Veh/h)	0	0	41	41	0	0	13	18	13	0	55	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	41	41	0	0	13	18	13	0	55	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			41			130	103	21	125	123	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			41			130	103	21	125	123	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			98	98	99	100	93	100
cM capacity (veh/h)	1623			1568			780	767	1057	808	747	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	41	41	44	55
Volume Left	0	41	13	0
Volume Right	41	0	13	0
cSH	1623	1568	839	747
Volume to Capacity	0.00	0.03	0.05	0.07
Queue Length 95th (m)	0.0	0.6	1.3	1.8
Control Delay (s/veh)	0.0	7.4	9.5	10.2
Lane LOS		A	A	B
Approach Delay (s/veh)	0.0	7.4	9.5	10.2
Approach LOS			A	B

Intersection Summary				
Average Delay		7.1		
Intersection Capacity Utilization		24.7%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	17	6	17	28	0
Future Volume (vph)	0	17	6	17	28	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.987		
Satd. Flow (prot)	1629	0	0	1859	1883	0
Flt Permitted				0.987		
Satd. Flow (perm)	1629	0	0	1859	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			32.9	35.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	17	6	17	28	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	17	0	0	23	28	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	17	6	17	28	0
Future Volume (Veh/h)	0	17	6	17	28	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	17	6	17	28	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	57	28	28			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	57	28	28			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	947	1047	1585			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	17	23	28
Volume Left	0	6	0
Volume Right	17	0	0
cSH	1047	1585	1700
Volume to Capacity	0.02	0.00*	0.02
Queue Length 95th (m)	0.4	0.1	0.0
Control Delay (s/veh)	8.5	1.9	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	1.9	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	16.1%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

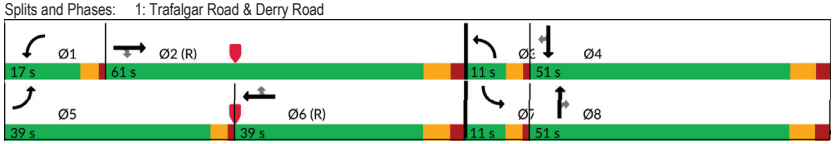
2041 Future Total

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	974	1752	376	374	591	216	151	1516	340	124	1319	108
Future Volume (vph)	974	1752	376	374	591	216	151	1516	340	124	1319	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			123			123			209			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	994	1788	384	382	603	220	154	1547	347	127	1346	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	994	1788	384	382	603	220	154	1547	347	127	1346	110
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	39.0	61.0	61.0	17.0	39.0	39.0	11.0	51.0	51.0	11.0	51.0	51.0
Total Split (%)	27.9%	43.6%	43.6%	12.1%	27.9%	27.9%	7.9%	36.4%	36.4%	7.9%	36.4%	36.4%
Maximum Green (s)	35.0	54.1	54.1	13.0	32.1	32.1	7.0	44.2	44.2	7.0	44.2	44.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	36.0	56.1	56.1	14.0	34.1	34.1	8.0	46.2	46.2	8.0	46.2	46.2
Actuated g/C Ratio	0.26	0.40	0.40	0.10	0.24	0.24	0.06	0.33	0.33	0.06	0.33	0.33
v/c Ratio	1.11	0.99	0.54	1.10	0.57	0.45	0.89	1.12	0.53	0.77	0.97	0.22
Control Delay (s/veh)	115.4	50.9	29.3	135.1	46.6	22.1	110.5	100.2	16.7	74.6	62.3	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	115.4	50.9	29.3	135.1	46.6	22.1	110.5	100.2	16.7	74.6	62.3	12.1
LOS	F	D	C	F	D	C	F	F	B	E	E	B
Approach Delay (s/veh)		68.6			70.2			86.9			59.8	
Approach LOS		E			E			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay (s/veh): 71.8		Intersection LOS: E	
Intersection Capacity Utilization 94.4%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	994	1788	384	382	603	220	154	1547	347	127	1346	110
v/c Ratio	1.11	0.99	0.54	1.10	0.57	0.45	0.89	1.12	0.53	0.77	0.97	0.22
Control Delay (s/veh)	115.4	50.9	29.3	135.1	46.6	22.1	110.5	100.2	16.7	74.6	62.3	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	115.4	50.9	29.3	135.1	46.6	22.1	110.5	100.2	16.7	74.6	62.3	12.1
Queue Length 50th (m)	~169.4	189.2	57.6	~59.4	62.1	22.6	24.7	~213.0	25.7	19.7	169.0	8.8
Queue Length 95th (m)	m#154.7	m169.4	m53.4	#97.4	73.7	42.4	m#33.9	m#244.8	m44.0	#36.4	#203.5	34.4
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	892	1811	708	347	1049	490	174	1377	656	166	1390	501
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.11	0.99	0.54	1.10	0.57	0.45	0.89	1.12	0.53	0.77	0.97	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	974	1752	376	374	591	216	151	1516	340	124	1319	108
Future Volume (vph)	974	1752	376	374	591	216	151	1516	340	124	1319	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	994	1788	384	382	603	220	154	1547	347	127	1346	110
RTOR Reduction (vph)	0	0	74	0	0	93	0	0	140	0	0	74
Lane Group Flow (vph)	994	1788	310	382	603	127	154	1547	207	127	1346	36
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	35.0	54.1	54.1	13.0	32.1	32.1	7.0	44.2	44.2	7.0	44.2	44.2
Effective Green, g (s)	36.0	56.1	56.1	14.0	34.1	34.1	8.0	46.2	46.2	8.0	46.2	46.2
Actuated g/C Ratio	0.26	0.40	0.40	0.10	0.24	0.24	0.06	0.33	0.33	0.06	0.33	0.33
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	892	1811	635	347	1049	397	174	1377	516	166	1390	418
v/s Ratio Prot	c0.29	c0.40		0.11	0.14		c0.05	c0.37		0.04	0.32	
v/s Ratio Perm			0.20			0.08			0.13			0.03
v/c Ratio	1.11	0.99	0.49	1.10	0.57	0.32	0.89	1.12	0.40	0.77	0.97	0.09
Uniform Delay, d1	52.0	41.6	31.3	63.0	46.6	43.4	65.5	46.9	36.2	65.1	46.2	32.4
Progression Factor	1.37	1.14	1.36	1.03	0.95	0.99	1.26	0.87	1.02	0.76	1.00	2.78
Incremental Delay, d2	53.2	4.1	0.2	76.9	2.2	2.0	27.2	61.9	0.6	19.1	15.6	0.2
Delay (s)	124.4	51.4	42.6	142.1	46.4	44.9	110.0	102.9	37.7	68.3	62.0	90.0
Level of Service	F	D	D	F	D	D	F	F	D	E	E	F
Approach Delay (s/veh)		73.3			76.4			92.4			64.5	
Approach LOS		E			E			F			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	76.9	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.09			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	94.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

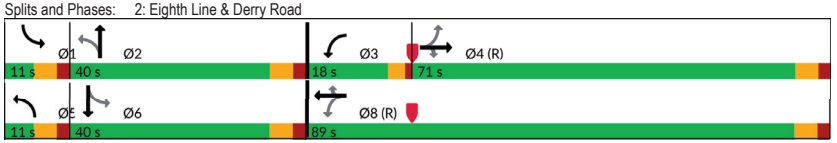
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1757	112	89	1031	20	95	26	59	8	9	11
Future Volume (vph)	35	1757	112	89	1031	20	95	26	59	8	9	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.896			0.917	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1654	0	1217	1614	0
Flt Permitted	0.218			0.054			0.447			0.700		
Satd. Flow (perm)	295	4520	1601	104	4391	1633	859	1654	0	897	1614	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		61			11	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Adj. Flow (vph)	36	1830	117	93	1074	21	99	27	61	8	9	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	1830	117	93	1074	21	99	88	0	8	20	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.5	36.0	36.0	11.0	36.0		11.0	36.0	
Total Split (s)	71.0	71.0	71.0	18.0	89.0	89.0	11.0	40.0		11.0	40.0	
Total Split (%)	50.7%	50.7%	50.7%	12.9%	63.6%	63.6%	7.9%	28.6%		7.9%	28.6%	
Maximum Green (s)	65.0	65.0	65.0	14.0	83.0	83.0	5.0	34.0		5.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0		23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0			0	
Act Effct Green (s)	93.9	93.9	93.9	108.8	106.8	106.8	20.0	18.8		12.7	10.6	
Actuated g/C Ratio	0.67	0.67	0.67	0.78	0.76	0.76	0.14	0.13		0.09	0.08	
v/c Ratio	0.18	0.60	0.11	0.49	0.32	0.02	0.50	0.32		0.08	0.15	
Control Delay (s/veh)	12.1	21.5	5.0	21.8	6.2	0.0	62.0	33.0		48.0	39.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	12.1	21.5	5.0	21.8	6.2	0.0	62.0	33.0		48.0	39.7	
LOS	B	C	A	C	A	A	E	C		D	D	
Approach Delay (s/veh)		20.4			7.3			48.4			42.1	
Approach LOS		C			A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay (s/veh): 17.5		Intersection LOS: B	
Intersection Capacity Utilization 64.1%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	36	1830	117	93	1074	21	99	88	8	20
v/c Ratio	0.18	0.60	0.11	0.49	0.32	0.02	0.50	0.32	0.08	0.15
Control Delay (s/veh)	12.1	21.5	5.0	21.8	6.2	0.0	62.0	33.0	48.0	39.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.1	21.5	5.0	21.8	6.2	0.0	62.0	33.0	48.0	39.7
Queue Length 50th (m)	8.6	157.2	10.2	6.8	45.4	0.0	27.5	14.9	2.5	2.4
Queue Length 95th (m)	m7.8	243.9	m11.3	21.7	47.8	0.0	#47.6	28.1	9.6	10.6
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	197	3032	1107	252	3349	1262	198	447	95	400
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.60	0.11	0.37	0.32	0.02	0.50	0.20	0.08	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1757	112	89	1031	20	95	26	59	8	9	11
Future Volume (vph)	35	1757	112	89	1031	20	95	26	59	8	9	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1654		1217	1615	
Flt Permitted	0.22	1.00	1.00	0.05	1.00	1.00	0.45	1.00		0.70	1.00	
Satd. Flow (perm)	294	4520	1601	103	4391	1633	858	1654		896	1615	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	36	1830	117	93	1074	21	99	27	61	8	9	11
RTOR Reduction (vph)	0	0	37	0	0	6	0	53	0	0	10	0
Lane Group Flow (vph)	36	1830	80	93	1074	15	99	35	0	8	10	0
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	89.1	89.1	89.1	102.0	102.0	102.0	26.0	18.8		10.2	9.0	
Effective Green, g (s)	89.1	89.1	89.1	102.0	102.0	102.0	26.0	18.8		10.2	9.0	
Actuated g/C Ratio	0.64	0.64	0.64	0.73	0.73	0.73	0.19	0.13		0.07	0.06	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	187	2876	1018	184	3199	1189	235	222		68	103	
v/s Ratio Prot		c0.40		c0.03	0.24		c0.03	0.02		0.00	0.01	
v/s Ratio Perm	0.12		0.05	0.33		0.01	c0.05			0.01		
v/c Ratio	0.19	0.64	0.08	0.51	0.34	0.01	0.42	0.16		0.12	0.09	
Uniform Delay, d1	10.5	15.6	9.7	15.6	6.8	5.2	49.2	53.6		60.6	61.7	
Progression Factor	0.87	1.45	1.73	1.00	1.00	1.00	1.01	1.47		1.00	1.00	
Incremental Delay, d2	1.5	0.7	0.1	2.2	0.3	0.0	1.2	0.3		0.8	0.4	
Delay (s)	10.7	23.3	17.0	17.8	7.1	5.2	51.1	79.1		61.3	62.1	
Level of Service	B	C	B	B	A	A	D	E		E	E	
Approach Delay (s/veh)		22.7			7.9			64.3			61.9	
Approach LOS		C			A			E			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	20.1	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.60			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0	
Intersection Capacity Utilization	64.1%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	445	929	474	213	380	114	195	1482	240	92	1903	323
Future Volume (vph)	445	929	474	213	380	114	195	1482	240	92	1903	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			106			125			183			326
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	449	938	479	215	384	115	197	1497	242	93	1922	326
Shared Lane Traffic (%)												
Lane Group Flow (vph)	449	938	479	215	384	115	197	1497	242	93	1922	326
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	22.0	47.0	47.0	15.0	40.0	40.0	12.0	67.0	67.0	11.0	66.0	66.0
Total Split (%)	15.7%	33.6%	33.6%	10.7%	28.6%	28.6%	8.6%	47.9%	47.9%	7.9%	47.1%	47.1%
Maximum Green (s)	18.0	41.0	41.0	11.0	34.0	34.0	8.0	60.0	60.0	7.0	59.0	59.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	19.0	40.7	40.7	11.8	33.6	33.6	11.2	64.1	64.1	8.3	61.2	61.2
Actuated g/C Ratio	0.14	0.29	0.29	0.08	0.24	0.24	0.08	0.46	0.46	0.06	0.44	0.44
v/c Ratio	0.98	0.72	0.91	0.73	0.36	0.24	0.86	0.77	0.30	0.54	1.02	0.42
Control Delay (s/veh)	97.7	47.9	58.9	66.0	45.4	20.9	69.8	49.7	21.7	75.8	52.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	97.7	47.9	58.9	66.0	45.4	20.9	69.8	49.7	21.7	75.8	52.7	5.6
LOS	F	D	E	E	D	C	E	D	C	E	D	A
Approach Delay (s/veh)		62.7			47.7			48.2			47.1	
Approach LOS		E			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay (s/veh): 51.7		Intersection LOS: D	
Intersection Capacity Utilization 83.0%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	449	938	479	215	384	115	197	1497	242	93	1922	326
v/c Ratio	0.98	0.72	0.91	0.73	0.36	0.24	0.86	0.77	0.30	0.54	1.02	0.42
Control Delay (s/veh)	97.7	47.9	58.9	66.0	45.4	20.9	69.8	49.7	21.7	75.8	52.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	97.7	47.9	58.9	66.0	45.4	20.9	69.8	49.7	21.7	75.8	52.7	5.6
Queue Length 50th (m)	67.4	97.2	105.8	30.7	42.2	7.4	~35.0	145.3	27.3	13.4	~251.5	23.6
Queue Length 95th (m)	#102.9	115.8	#169.3	#45.0	56.1	30.5	m#38.7	m144.3	m29.1	m16.2	m#259.9	m27.8
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	457	1374	551	300	1139	512	229	1948	816	171	1878	780
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.68	0.87	0.72	0.34	0.22	0.86	0.77	0.30	0.54	1.02	0.42

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	445	929	474	213	380	114	195	1482	240	92	1903	323
Future Volume (vph)	445	929	474	213	380	114	195	1482	240	92	1903	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	449	938	479	215	384	115	197	1497	242	93	1922	326
RTOR Reduction (vph)	0	0	75	0	0	87	0	0	99	0	0	183
Lane Group Flow (vph)	449	938	404	215	384	28	197	1497	143	93	1922	143
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	18.0	38.8	38.8	10.8	31.6	31.6	10.2	62.1	62.1	7.3	59.2	59.2
Effective Green, g (s)	19.0	40.8	40.8	11.8	33.6	33.6	11.2	64.1	64.1	8.3	61.2	61.2
Actuated g/C Ratio	0.14	0.29	0.29	0.08	0.24	0.24	0.08	0.46	0.46	0.06	0.44	0.44
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	457	1304	453	295	1063	391	229	1947	717	171	1877	596
v/s Ratio Prot	c0.13	0.21		0.06	0.09		c0.07	c0.35		0.03	c0.45	
v/s Ratio Perm			c0.26			0.02			0.09			0.10
v/c Ratio	0.98	0.72	0.89	0.73	0.36	0.07	0.86	0.77	0.20	0.54	1.02	0.24
Uniform Delay, d1	60.3	44.5	47.5	62.5	44.3	41.1	63.6	31.8	22.6	64.0	39.4	24.8
Progression Factor	1.00	1.00	1.00	0.82	1.01	3.60	0.88	1.49	3.24	1.07	0.78	1.87
Incremental Delay, d2	37.3	1.9	19.3	8.6	0.2	0.1	10.4	1.0	0.2	1.9	21.7	0.5
Delay (s)	97.6	46.4	66.8	60.1	45.1	148.2	66.6	48.4	73.4	70.6	52.6	46.9
Level of Service	F	D	E	E	D	F	E	D	E	E	D	D
Approach Delay (s/veh)		64.0			66.2			53.4			52.6	
Approach LOS		E			E			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	57.3	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	0.97			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

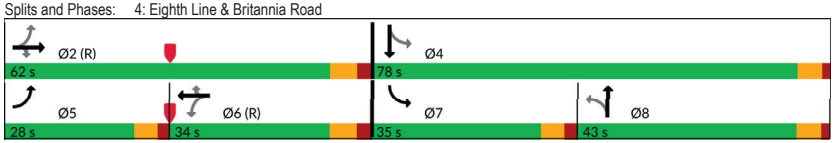
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	1139	13	25	664	59	19	107	28	49	123	23
Future Volume (vph)	28	1139	13	25	664	59	19	107	28	49	123	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.968			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1775	0	1825	1875	0
Flt Permitted	0.313			0.196			0.662			0.363		
Satd. Flow (perm)	601	4476	1306	377	4476	1633	1167	1775	0	697	1875	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		9			10	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	29	1162	13	26	678	60	19	109	29	50	126	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	1162	13	26	678	60	19	138	0	50	150	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	28.0	62.0	62.0	34.0	34.0	34.0	43.0	43.0		35.0	78.0	
Total Split (%)	20.0%	44.3%	44.3%	24.3%	24.3%	24.3%	30.7%	30.7%		25.0%	55.7%	
Maximum Green (s)	22.0	55.2	55.2	27.2	27.2	27.2	37.3	37.3		29.0	72.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	98.7	97.9	97.9	90.3	90.3	90.3	17.0	17.0		29.3	29.6	
Actuated g/C Ratio	0.71	0.70	0.70	0.65	0.65	0.65	0.12	0.12		0.21	0.21	
v/c Ratio	0.06	0.37	0.01	0.11	0.24	0.05	0.13	0.62		0.23	0.37	
Control Delay (s/veh)	22.9	31.3	3.5	15.6	12.5	0.1	67.1	76.8		40.0	39.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	22.9	31.3	3.5	15.6	12.5	0.1	67.1	76.8		40.0	39.4	
LOS	C	C	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		30.8			11.6			75.6			39.5	
Approach LOS		C			B			E			D	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay (s/veh): 28.3 Intersection LOS: C
Intersection Capacity Utilization 63.4% ICU Level of Service B
Analysis Period (min) 15
* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	1162	13	26	678	60	19	138	50	150
v/c Ratio	0.06	0.37	0.01	0.11	0.24	0.05	0.13	0.62	0.23	0.37
Control Delay (s/veh)	22.9	31.3	3.5	15.6	12.5	0.1	67.1	76.8	40.0	39.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.9	31.3	3.5	15.6	12.5	0.1	67.1	76.8	40.0	39.4
Queue Length 50th (m)	5.5	119.3	0.0	2.9	35.3	0.0	4.6	31.0	9.5	27.6
Queue Length 95th (m)	m10.3	138.1	m0.1	9.3	52.6	0.0	m10.4	45.2	14.2	31.2
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	615	3128	933	242	2885	1093	310	479	394	973
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.37	0.01	0.11	0.24	0.05	0.06	0.29	0.13	0.15

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	1139	13	25	664	59	19	107	28	49	123	23
Future Volume (vph)	28	1139	13	25	664	59	19	107	28	49	123	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1776		1825	1875	
Flt Permitted	0.31	1.00	1.00	0.20	1.00	1.00	0.66	1.00		0.36	1.00	
Satd. Flow (perm)	602	4476	1306	376	4476	1633	1166	1776		698	1875	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	29	1162	13	26	678	60	19	109	29	50	126	24
RTOR Reduction (vph)	0	0	4	0	0	23	0	8	0	0	8	0
Lane Group Flow (vph)	29	1162	9	26	678	37	19	130	0	50	142	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	96.7	96.7	96.7	86.7	86.7	86.7	17.0	17.0		30.8	30.8	
Effective Green, g (s)	96.7	96.7	96.7	86.7	86.7	86.7	17.0	17.0		30.8	30.8	
Actuated g/C Ratio	0.69	0.69	0.69	0.62	0.62	0.62	0.12	0.12		0.22	0.22	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	450	3091	902	232	2771	1011	141	215		216	412	
v/s Ratio Prot	0.00	c0.26			0.15			c0.07		0.01	c0.08	
v/s Ratio Perm	0.04		0.01	0.07		0.02	0.02			0.04		
v/c Ratio	0.06	0.38	0.01	0.11	0.24	0.04	0.13	0.61		0.23	0.35	
Uniform Delay, d1	7.1	9.0	6.7	10.9	12.0	10.4	54.9	58.3		44.2	46.1	
Progression Factor	2.77	3.26	1.00	1.00	1.00	1.00	1.21	1.20		0.91	0.88	
Incremental Delay, d2	0.0	0.3	0.0	1.0	0.2	0.1	0.4	4.5		0.5	0.5	
Delay (s)	19.8	29.8	6.8	11.9	12.2	10.5	66.9	74.5		40.6	40.9	
Level of Service	B	C	A	B	B	B	E	E		D	D	
Approach Delay (s/veh)		29.3			12.0			73.6			40.8	
Approach LOS		C			B			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	27.6	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.44				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		24.5	
Intersection Capacity Utilization	63.4%	ICU Level of Service		B	
Analysis Period (min)	15				

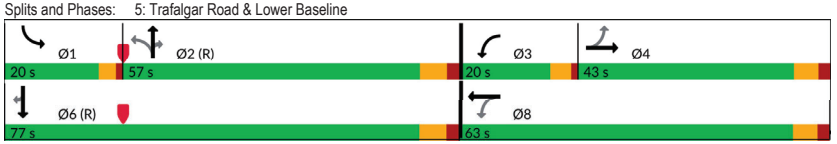
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	471	96	296	178	178	46	1627	213	463	2061	83
Future Volume (vph)	177	471	96	296	178	178	46	1627	213	463	2061	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt		0.975			0.925				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	1851	0	1789	1709	0	1631	4214	1551	3319	4295	1521
Flt Permitted	0.541			0.097			0.078			0.950		
Satd. Flow (perm)	990	1851	0	183	1709	0	134	4214	1551	3319	4295	1521
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			44				132			60
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	184	491	100	308	185	185	46	1627	213	482	2147	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	184	591	0	308	370	0	46	1627	213	482	2147	86
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2		2			6
Detector Phase	4	4		3	8		2	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		25.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	24.2	24.2		11.5	24.2		31.6	31.6	31.6	11.0	31.6	31.6
Total Split (s)	43.0	43.0		20.0	63.0		57.0	57.0	57.0	20.0	77.0	77.0
Total Split (%)	30.7%	30.7%		14.3%	45.0%		40.7%	40.7%	40.7%	14.3%	55.0%	55.0%
Maximum Green (s)	36.8	36.8		15.5	56.8		50.4	50.4	50.4	16.0	70.4	70.4
Yellow Time (s)	4.2	4.2		3.5	4.2		4.6	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	2.0	2.0		1.0	2.0		2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	5.2	4.2		3.5	4.2		5.6	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lag	Lag		Lead			Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0							
Flash Don't Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	37.8	38.8		59.5	58.8		51.4	52.4	52.4	17.0	72.4	72.4
Actuated g/C Ratio	0.27	0.28		0.43	0.42		0.37	0.37	0.37	0.12	0.52	0.52
v/c Ratio	0.69	1.14		1.15	0.50		0.94	1.03	0.32	1.20	0.97	0.11
Control Delay (s/veh)	60.8	129.2		136.5	37.2		158.1	74.0	13.1	143.3	57.4	17.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.8	129.2		136.5	37.2		158.1	74.0	13.1	143.3	57.4	17.6
LOS	E	F		F	D		F	E	B	F	E	B
Approach Delay (s/veh)		112.9			82.3			69.1			71.4	
Approach LOS		F			F			E			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.20			
Intersection Signal Delay (s/veh): 77.2		Intersection LOS: E	
Intersection Capacity Utilization 123.0%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	184	591	308	370	46	1627	213	482	2147	86
v/c Ratio	0.69	1.14	1.15	0.50	0.94	1.03	0.32	1.20	0.97	0.11
Control Delay (s/veh)	60.8	129.2	136.5	37.2	158.1	74.0	13.1	143.3	57.4	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.8	129.2	136.5	37.2	158.1	74.0	13.1	143.3	57.4	17.6
Queue Length 50th (m)	47.7	~191.3	~85.4	81.6	12.9	~211.9	15.1	~85.8	249.9	9.6
Queue Length 95th (m)	77.3	#264.2	#145.4	113.8	#41.5	#247.3	35.2	m#91.1	m250.5	m10.5
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	267	518	267	743	49	1577	663	403	2221	815
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	1.14	1.15	0.50	0.94	1.03	0.32	1.20	0.97	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	471	96	296	178	178	46	1627	213	463	2061	83
Future Volume (vph)	177	471	96	296	178	178	46	1627	213	463	2061	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	5.2	4.2		3.5	4.2		5.6	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	0.97		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1738	1851		1789	1709		1631	4214	1551	3319	4295	1521
Flt Permitted	0.54	1.00		0.10	1.00		0.08	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	990	1851		182	1709		134	4214	1551	3319	4295	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	184	491	100	308	185	185	46	1627	213	482	2147	86
RTOR Reduction (vph)	0	5	0	0	26	0	0	0	83	0	0	29
Lane Group Flow (vph)	184	586	0	308	344	0	46	1627	130	482	2147	57
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2		2			6
Actuated Green, G (s)	36.8	36.8		56.8	56.8		50.4	50.4	50.4	16.0	70.4	70.4
Effective Green, g (s)	37.8	38.8		57.8	58.8		51.4	52.4	52.4	17.0	72.4	72.4
Actuated g/C Ratio	0.27	0.28		0.41	0.42		0.37	0.37	0.37	0.12	0.52	0.52
Clearance Time (s)	6.2	6.2		4.5	6.2		6.6	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	267	512		264	717		49	1577	580	403	2221	786
v/s Ratio Prot		0.32		c0.14	0.20			c0.39		c0.15	0.50	
v/s Ratio Perm	0.19			c0.34			0.34		0.08			0.04
v/c Ratio	0.69	1.14		1.17	0.48		0.94	1.03	0.22	1.20	0.97	0.07
Uniform Delay, d1	45.8	50.6		42.9	29.5		42.8	43.8	29.9	61.5	32.6	17.0
Progression Factor	1.00	1.00		1.00	1.33		1.00	1.00	1.00	0.89	1.60	2.69
Incremental Delay, d2	9.2	86.0		106.1	1.0		111.6	31.2	0.9	97.0	5.9	0.1
Delay (s)	55.0	136.6		148.9	40.2		154.3	75.0	30.8	151.6	58.1	45.7
Level of Service	E	F		F	D		F	E	C	F	E	D
Approach Delay (s/veh)		117.3			89.6			72.0			74.3	
Approach LOS		F			F			E			E	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	80.8	HCM 2000 Level of Service	F		
HCM 2000 Volume to Capacity ratio	1.13				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3		
Intersection Capacity Utilization	123.0%	ICU Level of Service	H		
Analysis Period (min)	15				

c Critical Lane Group

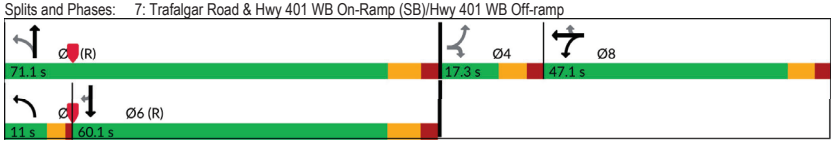
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	349	6	280	12	707	0	0	1321	117
Future Volume (vph)	0	0	6	349	6	280	12	707	0	0	1321	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1633	2879	1921	2456	1825	3941	0	0	4309	1276
Flt Permitted				0.950			0.127					
Satd. Flow (perm)	1883	0	1633	2879	1921	2456	244	3941	0	0	4309	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			176			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Adj. Flow (vph)	0	0	6	349	6	280	12	707	0	0	1321	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	6	349	6	280	12	707	0	0	1321	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	21.0	21.0	21.0	99.9	95.8			91.4	91.4
Actuated g/C Ratio			0.07	0.15	0.15	0.15	0.74	0.71			0.67	0.67
v/c Ratio			0.02	0.78	0.02	0.45	0.05	0.25			0.45	0.13
Control Delay (s/veh)			0.2	67.4	45.7	7.6	8.1	8.6			13.4	2.8
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.2	67.4	45.7	7.6	8.1	8.6			13.4	2.8
LOS			A	E	D	A	A	A			B	A
Approach Delay (s/veh)		0.2			40.8			8.6			12.5	
Approach LOS		A			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 17.9		Intersection LOS: B	
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	6	349	6	280	12	707	1321	117
v/c Ratio	0.02	0.78	0.02	0.45	0.05	0.25	0.45	0.13
Control Delay (s/veh)	0.2	67.4	45.7	7.6	8.1	8.6	13.4	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.2	67.4	45.7	7.6	8.1	8.6	13.4	2.8
Queue Length 50th (m)	0.0	55.5	1.4	0.0	0.7	26.0	53.5	0.0
Queue Length 95th (m)	0.0	71.7	5.3	14.6	3.9	56.9	133.0	11.2
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	283	849	567	922	261	2787	2907	901
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.41	0.01	0.30	0.05	0.25	0.45	0.13

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	349	6	280	12	707	0	0	1321	117
Future Volume (vph)	0	0	6	349	6	280	12	707	0	0	1321	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3941			4309	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.13	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	243	3941			4309	1276
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	6	349	6	280	12	707	0	0	1321	117
RTOR Reduction (vph)	0	0	6	0	0	237	0	0	0	0	0	45
Lane Group Flow (vph)	0	0	0	349	6	43	12	707	0	0	1321	72
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	21.0	21.0	21.0	90.0	90.0			83.2	83.2
Effective Green, g (s)			2.0	21.0	21.0	21.0	90.0	90.0			83.2	83.2
Actuated g/C Ratio			0.01	0.15	0.15	0.15	0.66	0.66			0.61	0.61
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	446	297	380	194	2617			2645	783
v/s Ratio Prot				c0.12	0.00		0.00	c0.18			c0.31	
v/s Ratio Perm			c0.00			0.02	0.04					0.06
v/c Ratio			0.00	0.78	0.02	0.11	0.06	0.27			0.50	0.09
Uniform Delay, d1			65.8	55.1	48.5	49.2	9.1	9.3			14.6	10.7
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	8.1	0.0	0.0	0.0	0.3			0.7	0.2
Delay (s)			65.8	63.1	48.5	49.3	9.1	9.6			15.2	10.9
Level of Service			E	E	D	D	A	A			B	B
Approach Delay (s/veh)		65.8			56.9			9.6			14.9	
Approach LOS		E			E			A			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	23.2	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.54				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)		26.5	
Intersection Capacity Utilization	62.6%	ICU Level of Service		B	
Analysis Period (min)	15				
c Critical Lane Group					

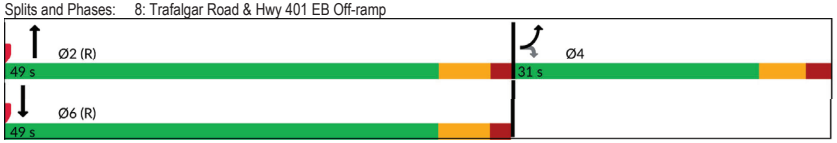
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	725	0	1231	921	0
Future Volume (vph)	114	725	0	1231	921	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.886	0.850				
Flt Protected	0.988					
Satd. Flow (prot)	2824	1339	0	4154	4117	0
Flt Permitted	0.988					
Satd. Flow (perm)	2824	1339	0	4154	4117	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	107	107				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Adj. Flow (vph)	114	725	0	1231	921	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	477	362	0	1231	921	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	21.5	21.5		44.5	44.5	
Actuated g/C Ratio	0.27	0.27		0.56	0.56	
v/c Ratio	0.57	0.83		0.53	0.40	
Control Delay (s/veh)	21.2	34.9		13.3	11.8	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	21.2	34.9		13.3	11.8	
LOS	C	C		B	B	
Approach Delay (s/veh)	27.1			13.3	11.8	
Approach LOS	C			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay (s/veh): 16.7		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	477	362	1231	921
v/c Ratio	0.57	0.83	0.53	0.40
Control Delay (s/veh)	21.2	34.9	13.3	11.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.2	34.9	13.3	11.8
Queue Length 50th (m)	29.5	42.7	52.1	35.5
Queue Length 95th (m)	42.9	75.8	75.6	52.9
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	963	494	2374	2353
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.50	0.73	0.52	0.39

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	725	0	1231	921	0
Future Volume (vph)	114	725	0	1231	921	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.89	0.85		1.00	1.00	
Flt Protected	0.99	1.00		1.00	1.00	
Satd. Flow (prot)	2824	1339		4154	4117	
Flt Permitted	0.99	1.00		1.00	1.00	
Satd. Flow (perm)	2824	1339		4154	4117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	725	0	1231	921	0
RTOR Reduction (vph)	78	78	0	0	0	0
Lane Group Flow (vph)	399	284	0	1231	921	0
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	21.5	21.5		44.5	44.5	
Effective Green, g (s)	21.5	21.5		44.5	44.5	
Actuated g/C Ratio	0.27	0.27		0.56	0.56	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	758	359		2310	2290	
v/s Ratio Prot	0.14			c0.30	0.22	
v/s Ratio Perm		c0.21				
v/c Ratio	0.53	0.79		0.53	0.40	
Uniform Delay, d1	24.9	27.2		11.2	10.1	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	11.3		0.9	0.5	
Delay (s)	25.6	38.4		12.1	10.7	
Level of Service	C	D		B	B	
Approach Delay (s/veh)	31.1			12.1	10.7	
Approach LOS	C			B	B	

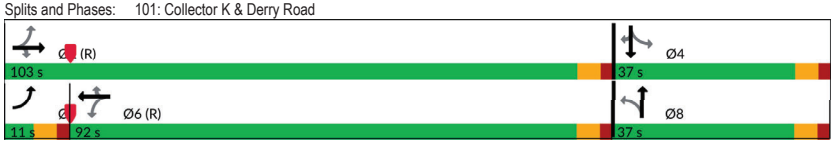
Intersection Summary				
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.62			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	59.4%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	3041	65	6	970	11	283	0	11	60	0	27
Future Volume (vph)	28	3041	65	6	970	11	283	0	11	60	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.183			0.045			0.757			0.750		
Satd. Flow (perm)	345	4520	1601	85	4520	1601	1426	1601	0	1413	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			33			70		70				166
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	3305	71	7	1054	12	308	0	12	65	0	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	3305	71	7	1054	12	308	12	0	65	0	29
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	103.0	103.0	92.0	92.0	92.0	37.0	37.0		37.0	37.0	37.0
Total Split (%)	7.9%	73.6%	73.6%	65.7%	65.7%	65.7%	26.4%	26.4%		26.4%	26.4%	26.4%
Maximum Green (s)	5.0	97.0	97.0	86.0	86.0	86.0	31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		None	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	97.0	97.0	97.0	90.4	90.4	90.4	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.65	0.65	0.65	0.22	0.22		0.22		0.22
v/c Ratio	0.10	1.06	0.06	0.13	0.36	0.01	0.98	0.03		0.21		0.06
Control Delay (s/veh)	7.5	55.5	4.1	8.5	3.6	0.0	99.2	0.1		46.7		0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	7.5	55.5	4.1	8.5	3.6	0.0	99.2	0.1		46.7		0.2
LOS	A	E	A	A	A	A	F	A		D		A
Approach Delay (s/veh)		54.0			3.6			95.5			32.3	
Approach LOS		D			A			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay (s/veh): 45.2		Intersection LOS: D	
Intersection Capacity Utilization 91.1%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	30	3305	71	7	1054	12	308	12	65	29
v/c Ratio	0.10	1.06	0.06	0.13	0.36	0.01	0.98	0.03	0.21	0.06
Control Delay (s/veh)	7.5	55.5	4.1	8.5	3.6	0.0	99.2	0.1	46.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.5	55.5	4.1	8.5	3.6	0.0	99.2	0.1	46.7	0.2
Queue Length 50th (m)	2.4	~422.9	3.1	0.2	13.1	0.0	86.9	0.0	15.1	0.0
Queue Length 95th (m)	5.6	#447.7	7.9	m0.6	19.2	m0.0	#146.6	0.0	28.7	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	290	3131	1119	54	2918	1058	315	409	312	483
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	1.06	0.06	0.13	0.36	0.01	0.98	0.03	0.21	0.06

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	3041	65	6	970	11	283	0	11	60	0	27
Future Volume (vph)	28	3041	65	6	970	11	283	0	11	60	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601		1789		1601
Flt Permitted	0.18	1.00	1.00	0.05	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	345	4520	1601	86	4520	1601	1426	1601		1412		1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	3305	71	7	1054	12	308	0	12	65	0	29
RTOR Reduction (vph)	0	0	10	0	0	4	0	9	0	0	0	23
Lane Group Flow (vph)	30	3305	61	7	1054	8	308	3	0	65	0	6
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	97.0	97.0	97.0	88.0	88.0	88.0	31.0	31.0		31.0		31.0
Effective Green, g (s)	97.0	97.0	97.0	88.0	88.0	88.0	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.63	0.63	0.63	0.22	0.22		0.22		0.22
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	269	3131	1109	54	2841	1006	315	354		312		354
v/s Ratio Prot	0.00	c0.73			0.23			0.00				
v/s Ratio Perm	0.07		0.04	0.08		0.00	c0.22			0.05		0.00
v/c Ratio	0.11	1.06	0.05	0.13	0.37	0.01	0.98	0.01		0.21		0.02
Uniform Delay, d1	7.8	21.5	6.9	10.5	12.6	9.7	54.2	42.5		44.5		42.6
Progression Factor	1.00	1.00	1.00	0.32	0.27	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.2	33.2	0.1	4.4	0.3	0.0	44.2	0.0		0.3		0.0
Delay (s)	8.0	54.7	7.0	7.7	3.7	9.7	98.3	42.5		44.8		42.6
Level of Service	A	D	A	A	A	A	F	D		D		D
Approach Delay (s/veh)		53.3			3.8			96.2			44.1	
Approach LOS		D			A			F			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	45.1	HCM 2000 Level of Service		D	
HCM 2000 Volume to Capacity ratio	1.09				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	91.1%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2060	44	0	1107	5	0	0	21	0	0	72
Future Volume (vph)	0	2060	44	0	1107	5	0	0	21	0	0	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2239	48	0	1203	5	0	0	23	0	0	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2239	48	0	1208	0	0	0	23	0	0	78
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	49.8%	ICU Level of Service A	
Analysis Period (min)	15		

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2060	44	0	1107	5	0	0	21	0	0	72
Future Volume (Veh/h)	0	2060	44	0	1107	5	0	0	21	0	0	72
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2239	48	0	1203	5	0	0	23	0	0	78
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.94			0.62			0.65	0.65	0.62	0.65	0.65	0.94
vC, conflicting volume	1208			2287			2718	3447	746	1975	3493	404
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	991			928			1119	2239	0	0	2309	133
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	97	100	100	91
cM capacity (veh/h)	651			454			95	27	672	643	24	836

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	746	746	746	48	481	481	246	23	78
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	48	0	0	5	23	78
cSH	1700	1700	1700	1700	1700	1700	1700	672	836
Volume to Capacity	0.44	0.44	0.44	0.03	0.28	0.28	0.14	0.03	0.09
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.3
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	9.7
Lane LOS								B	A
Approach Delay (s/veh)	0.0				0.0			10.5	9.7
Approach LOS								B	A

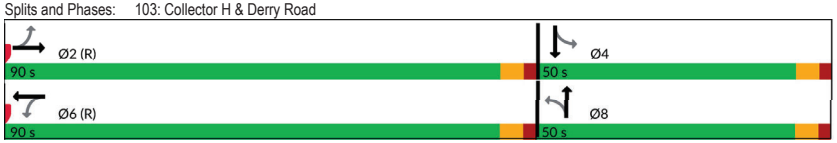
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	49.8%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	1961	51	14	1084	17	207	0	18	20	2	26
Future Volume (vph)	99	1961	51	14	1084	17	207	0	18	20	2	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.998			0.989			0.927	
Flt Protected	0.950			0.950				0.956			0.979	
Satd. Flow (prot)	1789	4502	0	1789	4511	0	0	1781	0	0	1709	0
Flt Permitted	0.169			0.041				0.741			0.872	
Satd. Flow (perm)	318	4502	0	77	4511	0	0	1380	0	0	1522	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2			23			28	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	108	2132	55	15	1178	18	225	0	20	22	2	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	2187	0	15	1196	0	0	245	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	90.0	90.0		90.0	90.0		50.0	50.0		50.0	50.0	
Total Split (%)	64.3%	64.3%		64.3%	64.3%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	84.0	84.0		84.0	84.0		44.0	44.0		44.0	44.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	98.5	98.5		98.5	98.5			29.5			29.5	
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.21			0.21	
v/c Ratio	0.48	0.69		0.28	0.38			0.79			0.15	
Control Delay (s/veh)	12.3	12.5		23.1	7.6			64.7			21.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	12.3	12.5		23.1	7.6			64.7			21.1	
LOS	B	B		C	A			E			C	
Approach Delay (s/veh)		12.4			7.8			64.7			21.1	
Approach LOS		B			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 14.5		Intersection LOS: B	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	108	2187	15	1196	245	52
v/c Ratio	0.48	0.69	0.28	0.38	0.79	0.15
Control Delay (s/veh)	12.3	12.5	23.1	7.6	64.7	21.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.3	12.5	23.1	7.6	64.7	21.1
Queue Length 50th (m)	10.9	97.1	1.1	39.9	60.1	4.4
Queue Length 95th (m)	m4.4	m33.9	m2.9	41.8	83.5	m14.6
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	223	3167	54	3173	449	497
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.69	0.28	0.38	0.55	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	1961	51	14	1084	17	207	0	18	20	2	26
Future Volume (vph)	99	1961	51	14	1084	17	207	0	18	20	2	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.99			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1789	4503		1789	4510			1781			1710	
Flt Permitted	0.17	1.00		0.04	1.00			0.74			0.87	
Satd. Flow (perm)	319	4503		76	4510			1380			1523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	108	2132	55	15	1178	18	225	0	20	22	2	28
RTOR Reduction (vph)	0	1	0	0	1	0	0	18	0	0	22	0
Lane Group Flow (vph)	108	2186	0	15	1195	0	0	227	0	0	30	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	98.5	98.5		98.5	98.5			29.5			29.5	
Effective Green, g (s)	98.5	98.5		98.5	98.5			29.5			29.5	
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.21			0.21	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	224	3168		53	3173			290			320	
v/s Ratio Prot		c0.49			0.27							
v/s Ratio Perm	0.34			0.20				c0.16			0.02	
v/c Ratio	0.48	0.69		0.28	0.38			0.78			0.09	
Uniform Delay, d1	9.3	12.0		7.7	8.4			52.2			44.5	
Progression Factor	0.65	0.89		0.82	0.79			1.00			0.92	
Incremental Delay, d2	3.4	0.6		11.7	0.3			12.9			0.1	
Delay (s)	9.5	11.2		17.9	6.9			65.1			40.9	
Level of Service	A	B		B	A			E			D	
Approach Delay (s/veh)		11.1			7.1			65.1			40.9	
Approach LOS		B			A			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	13.7	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.71				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	89.9%	ICU Level of Service		E	
Analysis Period (min)	15				

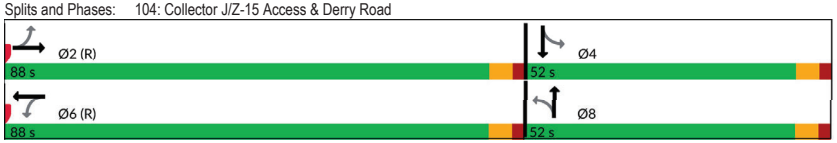
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	1887	67	8	1074	33	271	0	24	7	0	27
Future Volume (vph)	94	1887	67	8	1074	33	271	0	24	7	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.996			0.989			0.894	
Flt Protected	0.950			0.950				0.956			0.989	
Satd. Flow (prot)	1789	4498	0	1789	4502	0	0	1781	0	0	1665	0
Flt Permitted	0.160			0.044				0.716			0.919	
Satd. Flow (perm)	301	4498	0	83	4502	0	0	1334	0	0	1547	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			5			23			29	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	102	2051	73	9	1167	36	295	0	26	8	0	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	2124	0	9	1203	0	0	321	0	0	37	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	88.0	88.0		88.0	88.0		52.0	52.0		52.0	52.0	
Total Split (%)	62.9%	62.9%		62.9%	62.9%		37.1%	37.1%		37.1%	37.1%	
Maximum Green (s)	82.0	82.0		82.0	82.0		46.0	46.0		46.0	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	91.4	91.4		91.4	91.4			36.6			36.6	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
v/c Ratio	0.52	0.72		0.17	0.41			0.88			0.09	
Control Delay (s/veh)	19.7	15.2		20.3	11.3			69.7			14.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	19.7	15.2		20.3	11.3			69.7			14.7	
LOS	B	B		C	B			E			B	
Approach Delay (s/veh)		15.4			11.4			69.7			14.7	
Approach LOS		B			B			E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 18.7		Intersection LOS: B	
Intersection Capacity Utilization 92.8%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	102	2124	9	1203	321	37
v/c Ratio	0.52	0.72	0.17	0.41	0.88	0.09
Control Delay (s/veh)	19.7	15.2	20.3	11.3	69.7	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.7	15.2	20.3	11.3	69.7	14.7
Queue Length 50th (m)	7.3	161.1	0.8	56.7	80.9	1.7
Queue Length 95th (m)	m11.8	74.9	m3.6	74.0	110.1	9.8
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	196	2938	54	2940	453	527
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.72	0.17	0.41	0.71	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	1887	67	8	1074	33	271	0	24	7	0	27
Future Volume (vph)	94	1887	67	8	1074	33	271	0	24	7	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.99			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4497		1789	4500			1781			1666	
Flt Permitted	0.16	1.00		0.04	1.00			0.72			0.92	
Satd. Flow (perm)	302	4497		82	4500			1335			1548	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	102	2051	73	9	1167	36	295	0	26	8	0	29
RTOR Reduction (vph)	0	2	0	0	2	0	0	17	0	0	21	0
Lane Group Flow (vph)	102	2122	0	9	1201	0	0	304	0	0	16	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	91.4	91.4		91.4	91.4			36.6			36.6	
Effective Green, g (s)	91.4	91.4		91.4	91.4			36.6			36.6	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	197	2935		53	2937			349			404	
v/s Ratio Prot		c0.47			0.27							
v/s Ratio Perm	0.34			0.11				c0.23			0.01	
v/c Ratio	0.52	0.72		0.17	0.41			0.87			0.04	
Uniform Delay, d1	12.7	16.0		9.5	11.5			49.4			38.6	
Progression Factor	0.70	0.81		0.91	0.88			1.00			1.00	
Incremental Delay, d2	7.1	1.2		6.6	0.4			20.4			0.0	
Delay (s)	16.0	14.1		15.2	10.5			69.9			38.6	
Level of Service	B	B		B	B			E			D	
Approach Delay (s/veh)		14.2			10.6			69.9			38.6	
Approach LOS		B			B			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	18.0	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.77				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	92.8%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3101	922	14	0	59
Future Volume (vph)	0	3101	922	14	0	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	*0.80	*0.80	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	4520	3014	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	4520	3014	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3371	1002	15	0	64
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3371	1002	15	0	64
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		
* User Entered Value			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3101	922	14	0	59
Future Volume (Veh/h)	0	3101	922	14	0	59
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3371	1002	15	0	64
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.87				0.39	0.87
vC, conflicting volume	1017				2126	501
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	722				0	130
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	92
cM capacity (veh/h)	762				398	780

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	1124	1124	1124	501	501	15	64
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	15	64
cSH	1700	1700	1700	1700	1700	1700	780
Volume to Capacity	0.66	0.66	0.66	0.29	0.29	0.00*	0.08
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Lane LOS							B
Approach Delay (s/veh)	0.0			0.0			10.0
Approach LOS							B

Intersection Summary				
Average Delay		0.1		
Intersection Capacity Utilization		63.2%	ICU Level of Service	B
Analysis Period (min)		15		

* Value less than 0.01.

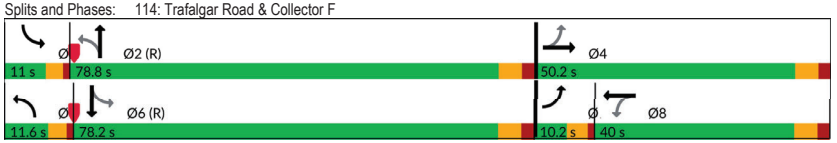
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	58	99	99	68	159	41	2023	86	101	1351	40
Future Volume (vph)	110	58	99	99	68	159	41	2023	86	101	1351	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.905			0.895			0.994			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1630	0	1652	1612	0	1711	4394	0	1711	4403	0
Flt Permitted	0.186			0.649			0.100			0.046		
Satd. Flow (perm)	323	1630	0	1128	1612	0	180	4394	0	83	4403	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		64			79			6			4	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	63	108	108	74	173	45	2199	93	110	1468	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	171	0	108	247	0	45	2292	0	110	1511	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0		40.0	40.0		11.5	26.0		11.0	26.0	
Total Split (s)	10.2	50.2		40.0	40.0		11.6	78.8		11.0	78.2	
Total Split (%)	7.3%	35.9%		28.6%	28.6%		8.3%	56.3%		7.9%	55.9%	
Maximum Green (s)	5.7	44.2		34.0	34.0		7.6	72.8		7.0	72.2	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)		27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0		0	0			0			0	
Act Effct Green (s)	32.8	31.3		20.7	20.7		91.7	82.4		98.1	87.6	
Actuated g/C Ratio	0.23	0.22		0.15	0.15		0.66	0.59		0.70	0.63	
v/c Ratio	0.90	0.41		0.65	0.81		0.23	0.89		0.62	0.55	
Control Delay (s/veh)	101.6	30.4		72.9	58.3		10.9	41.8		43.2	18.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	101.6	30.4		72.9	58.3		10.9	41.8		43.2	18.0	
LOS	F	C		E	E		B	D		D	B	
Approach Delay (s/veh)		59.8			62.8			41.2			19.8	
Approach LOS		E			E			D			B	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 130		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.90		
Intersection Signal Delay (s/veh): 36.5	Intersection LOS: D	
Intersection Capacity Utilization 83.4%	ICU Level of Service E	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	120	171	108	247	45	2292	110	1511
v/c Ratio	0.90	0.41	0.65	0.81	0.23	0.89	0.62	0.55
Control Delay (s/veh)	101.6	30.4	72.9	58.3	10.9	41.8	43.2	18.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	101.6	30.4	72.9	58.3	10.9	41.8	43.2	18.0
Queue Length 50th (m)	28.2	25.5	29.1	47.0	4.9	285.6	19.6	98.8
Queue Length 95th (m)	#56.2	43.9	46.6	72.7	m6.4	m259.3	31.7	115.6
Internal Link Dist (m)		200.2		176.3		308.8		241.5
Turn Bay Length (m)	60.0		50.0		50.0		70.0	
Base Capacity (vph)	133	558	273	451	202	2589	177	2757
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.31	0.40	0.55	0.22	0.89	0.62	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	58	99	99	68	159	41	2023	86	101	1351	40
Future Volume (vph)	110	58	99	99	68	159	41	2023	86	101	1351	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.91		1.00	0.89		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1630		1652	1611		1711	4394		1711	4402	
Flt Permitted	0.19	1.00		0.65	1.00		0.10	1.00		0.05	1.00	
Satd. Flow (perm)	323	1630		1128	1611		180	4394		83	4402	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	63	108	108	74	173	45	2199	93	110	1468	43
RTOR Reduction (vph)	0	50	0	0	67	0	0	2	0	0	2	0
Lane Group Flow (vph)	120	121	0	108	180	0	45	2290	0	110	1509	0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.3	31.3		20.7	20.7		88.3	82.4		96.7	86.8	
Effective Green, g (s)	31.3	31.3		20.7	20.7		88.3	82.4		96.7	86.8	
Actuated g/C Ratio	0.22	0.22		0.15	0.15		0.63	0.59		0.69	0.62	
Clearance Time (s)	4.5	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	130	364		166	238		178	2586		177	2729	
v/s Ratio Prot	c0.04	0.07			0.11		0.01	c0.52		c0.05	0.34	
v/s Ratio Perm	c0.17			0.10			0.15			0.38		
v/c Ratio	0.92	0.33		0.65	0.75		0.25	0.89		0.62	0.55	
Uniform Delay, d1	51.3	45.6		56.2	57.2		11.3	24.7		35.4	15.4	
Progression Factor	1.00	1.00		1.00	1.00		1.33	1.62		1.13	1.06	
Incremental Delay, d2	55.6	0.5		8.8	12.7		0.1	0.5		6.2	0.8	
Delay (s)	106.9	46.1		65.0	70.0		15.1	40.6		46.3	17.0	
Level of Service	F	D		E	E		B	D		D	B	
Approach Delay (s/veh)		71.2			68.5			40.1			19.0	
Approach LOS		E			E			D			B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

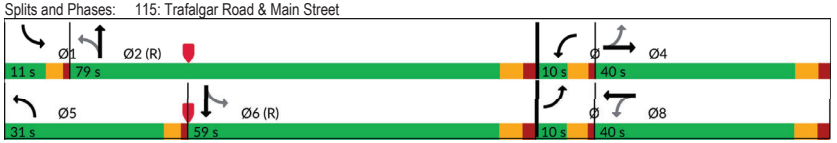
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	111	339	107	313	72	315	2043	183	88	1339	148
Future Volume (vph)	113	111	339	107	313	72	315	2043	183	88	1339	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.887			0.972			0.988			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3174	0	1789	3478	0	1711	4368	0	1711	4355	0
Flt Permitted	0.280			0.197			0.062			0.060		
Satd. Flow (perm)	527	3174	0	371	3478	0	112	4368	0	108	4355	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		329			19			13			13	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	114	112	342	108	316	73	318	2064	185	89	1353	149
Shared Lane Traffic (%)												
Lane Group Flow (vph)	114	454	0	108	389	0	318	2249	0	89	1502	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0		9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	10.0	40.0		10.0	40.0		31.0	79.0		11.0	59.0	
Total Split (%)	7.1%	28.6%		7.1%	28.6%		22.1%	56.4%		7.9%	42.1%	
Maximum Green (s)	5.5	34.0		5.5	34.0		27.0	73.0		7.0	53.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		27.0			27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	28.0	20.4		27.7	20.3		99.1	83.9		78.3	67.0	
Actuated g/C Ratio	0.20	0.15		0.20	0.15		0.71	0.60		0.56	0.48	
v/c Ratio	0.71	0.61		0.81	0.75		0.84	0.86		0.54	0.72	
Control Delay (s/veh)	70.9	18.5		86.7	63.6		31.7	45.4		38.6	31.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	70.9	18.5		86.7	63.6		31.7	45.4		38.6	31.1	
LOS	E	B		F	E		C	D		D	C	
Approach Delay (s/veh)		29.0			68.6			43.7			31.5	
Approach LOS		C			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay (s/veh): 40.8		Intersection LOS: D	
Intersection Capacity Utilization 86.4%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	114	454	108	389	318	2249	89	1502
v/c Ratio	0.71	0.61	0.81	0.75	0.84	0.86	0.54	0.72
Control Delay (s/veh)	70.9	18.5	86.7	63.6	31.7	45.4	38.6	31.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	70.9	18.5	86.7	63.6	31.7	45.4	38.6	31.1
Queue Length 50th (m)	26.7	16.7	25.2	53.3	73.6	245.1	5.9	136.5
Queue Length 95th (m)	#46.1	33.1	#51.5	68.5	m83.1	m249.3	27.3	189.2
Internal Link Dist (m)		882.8		603.0		688.8		212.3
Turn Bay Length (m)	60.0		90.0		50.0		50.0	
Base Capacity (vph)	160	1019	133	859	414	2622	166	2091
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.71	0.45	0.81	0.45	0.77	0.86	0.54	0.72

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	111	339	107	313	72	315	2043	183	88	1339	148
Future Volume (vph)	113	111	339	107	313	72	315	2043	183	88	1339	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.89		1.00	0.97		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3174		1789	3478		1711	4366		1711	4355	
Flt Permitted	0.28	1.00		0.20	1.00		0.06	1.00		0.06	1.00	
Satd. Flow (perm)	527	3174		371	3478		112	4366		108	4355	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	114	112	342	108	316	73	318	2064	185	89	1353	149
RTOR Reduction (vph)	0	281	0	0	16	0	0	5	0	0	7	0
Lane Group Flow (vph)	114	173	0	108	373	0	318	2244	0	89	1495	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	26.5	20.4		26.3	20.3		97.1	83.8		76.3	67.0	
Effective Green, g (s)	26.5	20.4		26.3	20.3		97.1	83.8		76.3	67.0	
Actuated g/C Ratio	0.19	0.15		0.19	0.15		0.69	0.60		0.54	0.48	
Clearance Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	154	462		130	504		375	2613		165	2084	
v/s Ratio Prot	0.03	0.05		c0.04	0.11		c0.16	c0.51		0.04	0.34	
v/s Ratio Perm	0.11			c0.12			0.43			0.26		
v/c Ratio	0.74	0.37		0.83	0.74		0.85	0.86		0.54	0.72	
Uniform Delay, d1	51.5	54.0		51.8	57.3		42.0	23.2		23.4	29.0	
Progression Factor	1.00	1.00		1.00	1.00		0.65	1.87		1.05	0.95	
Incremental Delay, d2	17.3	0.5		34.2	5.6		5.6	1.3		3.2	2.1	
Delay (s)	68.7	54.5		86.0	63.0		33.0	44.6		27.8	29.5	
Level of Service	E	D		F	E		C	D		C	C	
Approach Delay (s/veh)		57.4			68.0			43.2			29.4	
Approach LOS		E			E			D			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	42.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

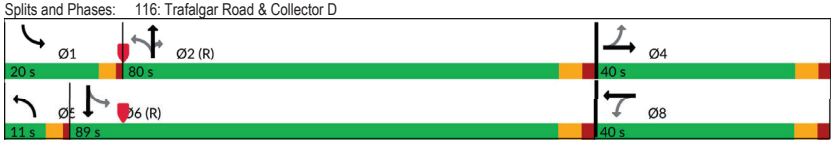
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	12	221	53	8	88	63	2140	138	232	1214	73
Future Volume (vph)	238	12	221	53	8	88	63	2140	138	232	1214	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.858			0.863				0.850		0.992	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1545	0	1652	1554	0	1711	4421	1566	1711	4386	0
Flt Permitted	0.676			0.390			0.131			0.051		
Satd. Flow (perm)	1175	1545	0	678	1554	0	236	4421	1566	92	4386	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		140			96				86		10	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	259	13	240	58	9	96	68	2326	150	252	1320	79
Shared Lane Traffic (%)												
Lane Group Flow (vph)	259	253	0	58	105	0	68	2326	150	252	1399	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		11.0	80.0	80.0	20.0	89.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		7.9%	57.1%	57.1%	14.3%	63.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		7.0	74.0	74.0	16.0	83.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	32.7	32.7		32.7	32.7		83.0	74.0	74.0	97.3	86.5	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.59	0.53	0.53	0.70	0.62	
v/c Ratio	0.95	0.54		0.37	0.24		0.32	1.00	0.17	0.95	0.52	
Control Delay (s/veh)	94.4	24.7		52.0	10.9		8.3	32.7	4.0	88.6	14.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	13.8	0.0	0.0	0.0	
Total Delay (s/veh)	94.4	24.7		52.0	10.9		8.3	46.5	4.0	88.6	14.3	
LOS	F	C		D	B		A	D	A	F	B	
Approach Delay (s/veh)		59.9			25.6			43.0			25.6	
Approach LOS		E			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 38.3		Intersection LOS: D	
Intersection Capacity Utilization 95.2%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	259	253	58	105	68	2326	150	252	1399
v/c Ratio	0.95	0.54	0.37	0.24	0.32	1.00	0.17	0.95	0.52
Control Delay (s/veh)	94.4	24.7	52.0	10.9	8.3	32.7	4.0	88.6	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	13.8	0.0	0.0	0.0
Total Delay (s/veh)	94.4	24.7	52.0	10.9	8.3	46.5	4.0	88.6	14.3
Queue Length 50th (m)	71.3	26.8	13.6	1.9	0.0	214.7	9.6	~65.0	50.8
Queue Length 95th (m)	#123.4	55.0	28.2	16.9	m3.0	#309.1	m5.4	m#115.9	97.5
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	285	481	164	450	213	2336	868	264	2713
Starvation Cap Reductn	0	0	0	0	0	100	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.53	0.35	0.23	0.32	1.04	0.17	0.95	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	238	12	221	53	8	88	63	2140	138	232	1214	73
Future Volume (vph)	238	12	221	53	8	88	63	2140	138	232	1214	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.86		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1544		1652	1554		1711	4421	1566	1711	4383	
Flt Permitted	0.68	1.00		0.39	1.00		0.13	1.00	1.00	0.05	1.00	
Satd. Flow (perm)	1175	1544		677	1554		235	4421	1566	92	4383	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	259	13	240	58	9	96	68	2326	150	252	1320	79
RTOR Reduction (vph)	0	107	0	0	74	0	0	0	41	0	4	0
Lane Group Flow (vph)	259	146	0	58	31	0	68	2326	109	252	1395	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	32.7	32.7		32.7	32.7		79.6	74.0	74.0	95.3	85.7	
Effective Green, g (s)	32.7	32.7		32.7	32.7		79.6	74.0	74.0	95.3	85.7	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.57	0.53	0.53	0.68	0.61	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	274	360		158	362		192	2336	827	262	2683	
v/s Ratio Prot		0.09			0.02		0.01	c0.53		c0.12	0.32	
v/s Ratio Perm	c0.22			0.09			0.19		0.07	0.53		
v/c Ratio	0.95	0.40		0.37	0.09		0.35	1.00	0.13	0.96	0.52	
Uniform Delay, d1	52.8	45.4		45.0	42.0		13.9	32.8	16.7	49.7	15.4	
Progression Factor	1.00	1.00		1.00	1.00		0.67	0.52	0.49	1.28	0.87	
Incremental Delay, d2	39.4	0.7		1.4	0.1		0.8	14.8	0.2	37.4	0.5	
Delay (s)	92.2	46.2		46.4	42.1		10.2	31.7	8.4	101.1	14.0	
Level of Service	F	D		D	D		B	C	A	F	B	
Approach Delay (s/veh)		69.4			43.6			29.8			27.3	
Approach LOS		E			D			C			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

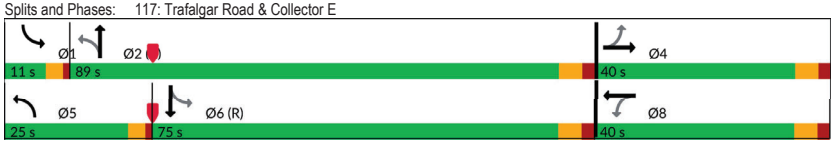
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	3	23	49	4	54	8	2240	44	64	1420	4
Future Volume (vph)	47	3	23	49	4	54	8	2240	44	64	1420	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.866			0.860			0.997				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1631	0	1789	1620	0	1711	4408	0	1711	4421	0
Flt Permitted	0.716			0.739			0.119			0.036		
Satd. Flow (perm)	1349	1631	0	1392	1620	0	214	4408	0	65	4421	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			59			3				
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	3	25	53	4	59	9	2435	48	70	1543	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	28	0	53	63	0	9	2483	0	70	1547	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	11.7	11.7		11.7	11.7		116.7	110.7		121.5	118.6	
Actuated g/C Ratio	0.08	0.08		0.08	0.08		0.83	0.79		0.87	0.85	
v/c Ratio	0.45	0.18		0.46	0.33		0.04	0.71		0.46	0.41	
Control Delay (s/veh)	73.4	24.8		73.4	20.2		3.5	10.5		29.4	6.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.1		0.0	0.0	
Total Delay (s/veh)	73.4	24.8		73.4	20.2		3.5	10.7		29.4	6.7	
LOS	E	C		E	C		A	B		C	A	
Approach Delay (s/veh)		56.2			44.5			10.6			7.7	
Approach LOS		E			D			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 72.6%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	51	28	53	63	9	2483	70	1547
v/c Ratio	0.45	0.18	0.46	0.33	0.04	0.71	0.46	0.41
Control Delay (s/veh)	73.4	24.8	73.4	20.2	3.5	10.5	29.4	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay (s/veh)	73.4	24.8	73.4	20.2	3.5	10.7	29.4	6.7
Queue Length 50th (m)	14.0	0.8	14.7	0.8	0.5	104.4	8.4	71.9
Queue Length 95th (m)	27.5	10.4	m27.8	m14.6	m0.6	113.7	24.0	77.2
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	327	415	338	438	410	3484	152	3744
Starvation Cap Reductn	0	0	0	0	0	30	0	0
Spillback Cap Reductn	0	0	0	2	0	220	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.07	0.16	0.14	0.02	0.76	0.46	0.41

Intersection Summary

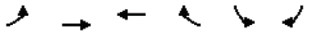
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	3	23	49	4	54	8	2240	44	64	1420	4
Future Volume (vph)	47	3	23	49	4	54	8	2240	44	64	1420	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.87		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1631		1789	1619		1711	4408		1711	4419	
Flt Permitted	0.72	1.00		0.74	1.00		0.12	1.00		0.04	1.00	
Satd. Flow (perm)	1348	1631		1392	1619		214	4408		65	4419	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	3	25	53	4	59	9	2435	48	70	1543	4
RTOR Reduction (vph)	0	23	0	0	55	0	0	1	0	0	0	0
Lane Group Flow (vph)	51	5	0	53	8	0	9	2482	0	70	1547	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	9.7	9.7		9.7	9.7		108.8	107.5		118.3	113.0	
Effective Green, g (s)	9.7	9.7		9.7	9.7		108.8	107.5		118.3	113.0	
Actuated g/C Ratio	0.07	0.07		0.07	0.07		0.78	0.77		0.85	0.81	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	93	113		96	112		180	3384		134	3566	
v/s Ratio Prot		0.00			0.00		0.00	c0.56		c0.03	0.35	
v/s Ratio Perm	0.04			c0.04			0.04			0.42		
v/c Ratio	0.55	0.04		0.55	0.07		0.05	0.73		0.52	0.43	
Uniform Delay, d1	63.0	60.8		63.0	60.9		3.5	8.6		22.0	4.0	
Progression Factor	1.00	1.00		1.00	0.99		1.48	0.99		1.18	1.70	
Incremental Delay, d2	6.5	0.2		6.7	0.3		0.1	0.7		3.2	0.3	
Delay (s)	69.5	61.0		70.0	60.7		5.3	9.2		29.2	7.1	
Level of Service	E	E		E	E		A	A		C	A	
Approach Delay (s/veh)		66.5			65.0			9.2			8.1	
Approach LOS		E			E			A			A	

Intersection Summary

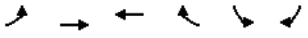
HCM 2000 Control Delay (s/veh)	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	19	491	510	266	72	5
Future Volume (vph)	19	491	510	266	72	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.949		0.992	
Flt Protected		0.998			0.955	
Satd. Flow (prot)	0	3414	3247	0	1706	0
Flt Permitted		0.998			0.955	
Satd. Flow (perm)	0	3414	3247	0	1706	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	534	554	289	78	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	555	843	0	83	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	19	491	510	266	72	5
Future Volume (Veh/h)	19	491	510	266	72	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	534	554	289	78	5
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	843				1008	422
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	843				1008	422
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				66	99
cM capacity (veh/h)	789				231	581

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	199	356	369	474	83
Volume Left	21	0	0	0	78
Volume Right	0	0	0	289	5
cSH	789	1700	1700	1700	239
Volume to Capacity	0.03	0.21	0.22	0.28	0.35
Queue Length 95th (m)	0.6	0.0	0.0	0.0	11.2
Control Delay (s/veh)	1.3	0.0	0.0	0.0	27.8
Lane LOS	A				D
Approach Delay (s/veh)	0.5		0.0		27.8
Approach LOS					D

Intersection Summary				
Average Delay		1.7		
Intersection Capacity Utilization		38.4%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	179	203	432	0	0	60
Future Volume (vph)	179	203	432	0	0	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.977				
Satd. Flow (prot)	0	3496	3579	0	1629	0
Flt Permitted		0.977				
Satd. Flow (perm)	0	3496	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	179	203	432	0	0	60
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	382	432	0	60	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	179	203	432	0	0	60
Future Volume (Veh/h)	179	203	432	0	0	60
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	179	203	432	0	0	60
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	432				892	216
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	432				892	216
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	84				100	92
cM capacity (veh/h)	1124				237	789

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	247	135	288	144	60
Volume Left	179	0	0	0	0
Volume Right	0	0	0	0	60
cSH	1124	1700	1700	1700	789
Volume to Capacity	0.16	0.08	0.17	0.08	0.08
Queue Length 95th (m)	4.3	0.0	0.0	0.0	1.9
Control Delay (s/veh)	6.8	0.0	0.0	0.0	9.9
Lane LOS	A				A
Approach Delay (s/veh)	4.4		0.0		9.9
Approach LOS					A

Intersection Summary				
Average Delay		2.6		
Intersection Capacity Utilization		36.5%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	203	0	0	0	0	432
Future Volume (vph)	203	0	0	0	0	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			70	48	
Link Distance (m)	745.9			80.2	161.7	
Travel Time (s)	55.9			4.1	12.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	0	0	0	0	470
Shared Lane Traffic (%)						
Lane Group Flow (vph)	221	0	0	0	0	470
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	203	0	0	0	0	432
Future Volume (vph)	203	0	0	0	0	432
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	221	0	0	0	0	470

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	221	0	470
Volume Left (vph)	221	0	0
Volume Right (vph)	0	0	470
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	6.1	5.5	4.0
Degree Utilization, x	0.37	0.00	0.53
Capacity (veh/h)	561	622	861
Control Delay (s/veh)	11.4	7.3	11.5
Approach Delay (s/veh)	11.4		11.5
Approach LOS	B		B

Intersection Summary			
Delay	11.5		
Level of Service	B		
Intersection Capacity Utilization	30.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	10	29	0	0	0
Future Volume (vph)	0	10	29	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	11	32	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	0	0	32	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	29	0	0	0
Future Volume (Veh/h)	0	10	29	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	11	32	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	64	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	64	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	98			
cM capacity (veh/h)	923	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	11	32	0
Volume Left	0	32	0
Volume Right	11	0	0
cSH	1085	1623	1700
Volume to Capacity	0.01	0.02	0.00
Queue Length 95th (m)	0.2	0.5	0.0
Control Delay (s/veh)	8.4	7.3	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	7.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

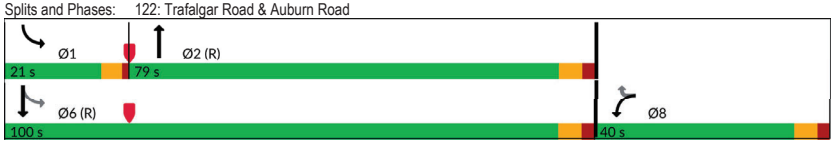
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	49	1989	102	111	1474
Future Volume (vph)	18	49	1989	102	111	1474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.993			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4390	0	1711	4421
Flt Permitted	0.950				0.045	
Satd. Flow (perm)	1789	1601	4390	0	81	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		49	7			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	18	49	1989	102	111	1474
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	49	2091	0	111	1474
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		5.0	20.0
Minimum Split (s)	40.0	40.0	40.0		9.5	40.0
Total Split (s)	40.0	40.0	79.0		21.0	100.0
Total Split (%)	28.6%	28.6%	56.4%		15.0%	71.4%
Maximum Green (s)	34.0	34.0	73.0		16.5	94.0
Yellow Time (s)	4.0	4.0	4.0		3.5	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Don't Walk (s)	9.0	9.0	27.0			27.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	10.0	10.0	106.3		122.7	122.4
Actuated g/C Ratio	0.07	0.07	0.76		0.88	0.87
v/c Ratio	0.14	0.31	0.63		0.58	0.38
Control Delay (s/veh)	63.8	21.4	3.6		33.7	2.5
Queue Delay	0.0	0.0	0.1		0.0	0.0
Total Delay (s/veh)	63.8	21.4	3.7		33.7	2.5
LOS	E	C	A		C	A
Approach Delay (s/veh)	32.8		3.7			4.7
Approach LOS	C		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 4.6		Intersection LOS: A	
Intersection Capacity Utilization 68.9%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	18	49	2091	111	1474
v/c Ratio	0.14	0.31	0.63	0.58	0.38
Control Delay (s/veh)	63.8	21.4	3.6	33.7	2.5
Queue Delay	0.0	0.0	0.1	0.0	0.0
Total Delay (s/veh)	63.8	21.4	3.7	33.7	2.5
Queue Length 50th (m)	4.9	0.0	48.1	11.2	31.6
Queue Length 95th (m)	13.1	12.9	23.0	30.8	36.4
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	434	425	3334	263	3865
Starvation Cap Reductn	0	0	193	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.12	0.67	0.42	0.38

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	49	1989	102	111	1474
Future Volume (vph)	18	49	1989	102	111	1474
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		4.5	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4389		1711	4421
Flt Permitted	0.95	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1789	1601	4389		81	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	18	49	1989	102	111	1474
RTOR Reduction (vph)	0	46	2	0	0	0
Lane Group Flow (vph)	18	3	2089	0	111	1474
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	8.0	8.0	105.1		120.0	120.0
Effective Green, g (s)	8.0	8.0	105.1		120.0	120.0
Actuated g/C Ratio	0.06	0.06	0.75		0.86	0.86
Clearance Time (s)	6.0	6.0	6.0		4.5	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	102	91	3294		190	3789
v/s Ratio Prot	c0.01		c0.48		c0.04	0.33
v/s Ratio Perm		0.00			0.46	
v/c Ratio	0.18	0.03	0.63		0.58	0.39
Uniform Delay, d1	62.9	62.3	8.3		27.0	2.1
Progression Factor	1.00	1.00	0.36		1.00	1.00
Incremental Delay, d2	0.8	0.1	0.5		4.5	0.3
Delay (s)	63.7	62.5	3.4		31.5	2.4
Level of Service	E	E	A		C	A
Approach Delay (s/veh)	62.8		3.4			4.5
Approach LOS	E		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	10	30	29	10	0
Future Volume (vph)	0	10	30	29	10	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.975		
Satd. Flow (prot)	1629	0	0	1836	1883	0
Flt Permitted				0.975		
Satd. Flow (perm)	1629	0	0	1836	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	10	30	29	10	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	0	0	59	10	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	30	29	10	0
Future Volume (Veh/h)	0	10	30	29	10	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	10	30	29	10	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	99	10	10			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	99	10	10			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	98			
cM capacity (veh/h)	883	1071	1610			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	10	59	10
Volume Left	0	30	0
Volume Right	10	0	0
cSH	1071	1610	1700
Volume to Capacity	0.00*	0.02	0.00*
Queue Length 95th (m)	0.2	0.4	0.0
Control Delay (s/veh)	8.4	3.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	3.8	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	19.9%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	47	32	28	52	60	76
Future Volume (vph)	47	32	28	52	60	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.945		0.912			
Flt Protected	0.971					0.979
Satd. Flow (prot)	1652	0	1642	0	0	1763
Flt Permitted	0.971					0.979
Satd. Flow (perm)	1652	0	1642	0	0	1763
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	35	30	57	65	83
Shared Lane Traffic (%)						
Lane Group Flow (vph)	86	0	87	0	0	148
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	47	32	28	52	60	76
Future Volume (Veh/h)	47	32	28	52	60	76
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	35	30	57	65	83
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	272	59			87	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272	59			87	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	97			96	
cM capacity (veh/h)	687	1007			1509	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	86	87	148
Volume Left	51	0	65
Volume Right	35	57	0
cSH	789	1700	1509
Volume to Capacity	0.11	0.05	0.04
Queue Length 95th (m)	2.8	0.0	1.0
Control Delay (s/veh)	10.1	0.0	3.5
Lane LOS	B		A
Approach Delay (s/veh)	10.1	0.0	3.5
Approach LOS	B		

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	25.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	165	10	50	94	0	7	8	26	111	6	0
Future Volume (vph)	0	165	10	50	94	0	7	8	26	111	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992						0.916				
Flt Protected					0.983			0.991			0.955	
Satd. Flow (prot)	0	1868	0	0	1770	0	0	1710	0	0	1799	0
Flt Permitted					0.983			0.991			0.955	
Satd. Flow (perm)	0	1868	0	0	1770	0	0	1710	0	0	1799	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	179	11	54	102	0	8	9	28	121	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	190	0	0	156	0	0	45	0	0	128	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	165	10	50	94	0	7	8	26	111	6	0
Future Volume (Veh/h)	0	165	10	50	94	0	7	8	26	111	6	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	179	11	54	102	0	8	9	28	121	7	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	102			190			398	395	185	427	400	102
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	102			190			398	395	185	427	400	102
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			99	98	97	76	99	100
cM capacity (veh/h)	1490			1384			540	521	858	498	517	953

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	190	156	45	128
Volume Left	0	54	8	121
Volume Right	11	0	28	0
cSH	1490	1384	695	499
Volume to Capacity	0.00	0.04	0.06	0.26
Queue Length 95th (m)	0.0	0.9	1.6	7.7
Control Delay (s/veh)	0.0	2.9	10.5	14.7
Lane LOS		A	B	B
Approach Delay (s/veh)	0.0	2.9	10.5	14.7
Approach LOS			B	B

Intersection Summary				
Average Delay		5.4		
Intersection Capacity Utilization		40.1%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	219	44	12	91	31	32
Future Volume (vph)	219	44	12	91	31	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.977				0.932	
Flt Protected				0.994	0.976	
Satd. Flow (prot)	1840	0	0	1872	1713	0
Flt Permitted				0.994	0.976	
Satd. Flow (perm)	1840	0	0	1872	1713	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	238	48	13	99	34	35
Shared Lane Traffic (%)						
Lane Group Flow (vph)	286	0	0	112	69	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	2	78	11	0	123
Future Volume (vph)	18	2	78	11	0	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988		0.983			
Flt Protected	0.957					
Satd. Flow (prot)	1644	0	1770	0	0	1801
Flt Permitted	0.957					
Satd. Flow (perm)	1644	0	1770	0	0	1801
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	2	85	12	0	134
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	97	0	0	134
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	18	2	78	11	0	123
Future Volume (Veh/h)	18	2	78	11	0	123
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	2	85	12	0	134
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	225	91			97	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	225	91			97	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			100	
cM capacity (veh/h)	763	967			1496	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	22	97	134
Volume Left	20	0	0
Volume Right	2	12	0
cSH	778	1700	1496
Volume to Capacity	0.03	0.06	0.00
Queue Length 95th (m)	0.7	0.0	0.0
Control Delay (s/veh)	9.8	0.0	0.0
Lane LOS	A		
Approach Delay (s/veh)	9.8	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	16.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	47	5	4	15	4	3	37	3	1	65	0
Future Volume (vph)	0	47	5	4	15	4	3	37	3	1	65	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.988			0.977			0.991				
Flt Protected					0.992			0.997			0.999	
Satd. Flow (prot)	0	1718	0	0	1685	0	0	1779	0	0	1799	0
Flt Permitted					0.992			0.997			0.999	
Satd. Flow (perm)	0	1718	0	0	1685	0	0	1779	0	0	1799	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	51	5	4	16	4	3	40	3	1	71	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	24	0	0	46	0	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	47	5	4	15	4	3	37	3	1	65	0
Future Volume (Veh/h)	0	47	5	4	15	4	3	37	3	1	65	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	51	5	4	16	4	3	40	3	1	71	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	133	122	71	151	121	42	71			43		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	133	122	71	151	121	42	71			43		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	93	99	99	98	100	100			100		
cM capacity (veh/h)	821	766	991	770	768	1029	1529			1566		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	56	24	46	72
Volume Left	0	4	3	1
Volume Right	5	4	3	0
cSH	782	802	1529	1566
Volume to Capacity	0.07	0.03	0.00*	0.00*
Queue Length 95th (m)	1.8	0.7	0.0	0.0
Control Delay (s/veh)	10.0	9.6	0.5	0.1
Lane LOS	A	A	A	A
Approach Delay (s/veh)	10.0	9.6	0.5	0.1
Approach LOS	A	A		

Intersection Summary					
Average Delay		4.1			
Intersection Capacity Utilization		15.1%	ICU Level of Service		A
Analysis Period (min)		15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	69	14	0	15	0	25	91	21	0	58	4
Future Volume (vph)	2	69	14	0	15	0	25	91	21	0	58	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.978						0.979			0.992	
Flt Protected		0.999						0.991				
Satd. Flow (prot)	0	1840	0	0	1883	0	0	1747	0	0	1786	0
Flt Permitted		0.999						0.991				
Satd. Flow (perm)	0	1840	0	0	1883	0	0	1747	0	0	1786	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	75	15	0	16	0	27	99	23	0	63	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	92	0	0	16	0	0	149	0	0	67	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	69	14	0	15	0	25	91	21	0	58	4
Future Volume (Veh/h)	2	69	14	0	15	0	25	91	21	0	58	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	75	15	0	16	0	27	99	23	0	63	4
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	238	241	65	282	232	111	67			122		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	238	241	65	282	232	111	67			122		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	88	98	100	98	100	98			100		
cM capacity (veh/h)	694	649	999	594	657	943	1535			1465		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	92	16	149	67
Volume Left	2	0	27	0
Volume Right	15	0	23	4
cSH	689	657	1535	1465
Volume to Capacity	0.13	0.02	0.02	0.00
Queue Length 95th (m)	3.5	0.6	0.4	0.0
Control Delay (s/veh)	11.0	10.6	1.5	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	11.0	10.6	1.5	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay		4.3		
Intersection Capacity Utilization		26.9%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	122	14	8	122	3	14	19	6	1	61	79
Future Volume (vph)	67	122	14	8	122	3	14	19	6	1	61	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.997			0.978			0.924	
Flt Protected		0.984			0.997			0.983				
Satd. Flow (prot)	0	1695	0	0	1790	0	0	1731	0	0	1664	0
Flt Permitted		0.984			0.997			0.983				
Satd. Flow (perm)	0	1695	0	0	1790	0	0	1731	0	0	1664	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	133	15	9	133	3	15	21	7	1	66	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	221	0	0	145	0	0	43	0	0	153	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	122	14	8	122	3	14	19	6	1	61	79
Future Volume (Veh/h)	67	122	14	8	122	3	14	19	6	1	61	79
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	73	133	15	9	133	3	15	21	7	1	66	86
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	235	169	109	247	209	25	152			28		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	235	169	109	247	209	25	152			28		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	81	98	98	80	100	99			100		
cM capacity (veh/h)	605	716	945	591	681	1052	1429			1585		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	221	145	43	153
Volume Left	73	9	15	1
Volume Right	15	3	7	86
cSH	685	679	1429	1585
Volume to Capacity	0.32	0.21	0.01	0.00*
Queue Length 95th (m)	10.6	6.1	0.2	0.0
Control Delay (s/veh)	12.7	11.7	2.7	0.1
Lane LOS	B	B	A	A
Approach Delay (s/veh)	12.7	11.7	2.7	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay		8.3		
Intersection Capacity Utilization		40.4%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	143	0	15	111	24	1	10	3	19	44	11
Future Volume (vph)	9	143	0	15	111	24	1	10	3	19	44	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.978			0.973			0.980	
Flt Protected		0.997			0.995			0.997			0.987	
Satd. Flow (prot)	0	1795	0	0	1752	0	0	1747	0	0	1742	0
Flt Permitted		0.997			0.995			0.997			0.987	
Satd. Flow (perm)	0	1795	0	0	1752	0	0	1747	0	0	1742	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	155	0	16	121	26	1	11	3	21	48	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	165	0	0	163	0	0	15	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	143	0	15	111	24	1	10	3	19	44	11
Future Volume (Veh/h)	9	143	0	15	111	24	1	10	3	19	44	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	155	0	16	121	26	1	11	3	21	48	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	147			155			377	354	155	350	341	134
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	147			155			377	354	155	350	341	134
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	98	100	96	92	99
cM capacity (veh/h)	1435			1425			529	561	891	586	570	915

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	165	163	15	81
Volume Left	10	16	1	21
Volume Right	0	26	3	12
cSH	1435	1425	603	609
Volume to Capacity	0.00*	0.01	0.02	0.13
Queue Length 95th (m)	0.2	0.3	0.6	3.5
Control Delay (s/veh)	0.5	0.8	11.1	11.8
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.5	0.8	11.1	11.8
Approach LOS			B	B

Intersection Summary					
Average Delay		3.2			
Intersection Capacity Utilization		28.1%	ICU Level of Service		A
Analysis Period (min)		15			

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	80	58	20	99	26	35
Future Volume (vph)	80	58	20	99	26	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.943				0.922	
Flt Protected	0.972			0.992		
Satd. Flow (prot)	1650	0	0	1786	1660	0
Flt Permitted	0.972			0.992		
Satd. Flow (perm)	1650	0	0	1786	1660	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	63	22	108	28	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	150	0	0	130	66	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	58	20	99	26	35
Future Volume (Veh/h)	80	58	20	99	26	35
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	87	63	22	108	28	38
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	199	47	66			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	199	47	66			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	89	94	99			
cM capacity (veh/h)	778	1022	1536			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	150	130	66
Volume Left	87	22	0
Volume Right	63	0	38
cSH	865	1536	1700
Volume to Capacity	0.17	0.01	0.04
Queue Length 95th (m)	4.8	0.3	0.0
Control Delay (s/veh)	10.0	1.3	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	10.0	1.3	0.0
Approach LOS	B		

Intersection Summary				
Average Delay	4.9			
Intersection Capacity Utilization	27.6%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	6	36	24	14	0
Future Volume (vph)	0	6	36	24	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.971		
Satd. Flow (prot)	1629	0	0	1829	1883	0
Flt Permitted				0.971		
Satd. Flow (perm)	1629	0	0	1829	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	278.5	
Travel Time (s)	16.7			24.3	14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	7	39	26	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	65	15	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	6	36	24	14	0
Future Volume (Veh/h)	0	6	36	24	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	7	39	26	15	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	119	15	15			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	119	15	15			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	98			
cM capacity (veh/h)	855	1065	1603			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	7	65	15
Volume Left	0	39	0
Volume Right	7	0	0
cSH	1065	1603	1700
Volume to Capacity	0.00*	0.02	0.00*
Queue Length 95th (m)	0.2	0.6	0.0
Control Delay (s/veh)	8.4	4.5	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	4.5	0.0
Approach LOS	A		

Intersection Summary					
Average Delay		4.0			
Intersection Capacity Utilization		19.9%	ICU Level of Service		A
Analysis Period (min)		15			

* Value less than 0.01.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	9	117	0	8	5	3
Future Volume (vph)	9	117	0	8	5	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.875				0.949	
Flt Protected					0.970	
Satd. Flow (prot)	1576	0	0	1801	1658	0
Flt Permitted					0.970	
Satd. Flow (perm)	1576	0	0	1801	1658	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	127	0	9	5	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	137	0	0	9	8	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	9	117	0	8	5	3
Future Volume (Veh/h)	9	117	0	8	5	3
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	127	0	9	5	3
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	13	0	144	12	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	13	0	144	12	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	99	88	100	99	100	
cM capacity (veh/h)	879	1085	721	880	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	137	9	8
Volume Left	0	0	5
Volume Right	127	0	3
cSH	1067	880	1623
Volume to Capacity	0.13	0.01	0.00*
Queue Length 95th (m)	3.3	0.2	0.1
Control Delay (s/veh)	8.9	9.1	4.5
Lane LOS	A	A	A
Approach Delay (s/veh)	8.9	9.1	4.5
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.7		
Intersection Capacity Utilization	17.7%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

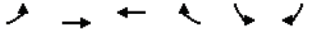
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	69	24	36	67	1
Future Volume (vph)	1	69	24	36	67	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.867				0.998	
Flt Protected	0.999			0.980		
Satd. Flow (prot)	1506	0	0	1765	1797	0
Flt Permitted	0.999			0.980		
Satd. Flow (perm)	1506	0	0	1765	1797	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	75	26	39	73	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	0	0	65	74	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	69	24	36	67	1
Future Volume (Veh/h)	1	69	24	36	67	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	75	26	39	73	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	165	74	74			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	165	74	74			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	98			
cM capacity (veh/h)	812	988	1526			

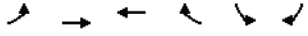
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	76	65	74
Volume Left	1	26	0
Volume Right	75	0	1
cSH	986	1526	1700
Volume to Capacity	0.08	0.02	0.04
Queue Length 95th (m)	1.9	0.4	0.0
Control Delay (s/veh)	9.0	3.0	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	9.0	3.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	20.9%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	26	314	91	53	157	52
Future Volume (vph)	26	314	91	53	157	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.950		0.966	
Flt Protected		0.996			0.964	
Satd. Flow (prot)	0	1793	1711	0	1619	0
Flt Permitted		0.996			0.964	
Satd. Flow (perm)	0	1793	1711	0	1619	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	341	99	58	171	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	369	157	0	228	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	314	91	53	157	52
Future Volume (Veh/h)	26	314	91	53	157	52
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	28	341	99	58	171	57
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	1.00				1.00	1.00
vC, conflicting volume	157				525	128
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	151				521	122
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				66	94
cM capacity (veh/h)	1424				504	925

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	369	157	228
Volume Left	28	0	171
Volume Right	0	58	57
cSH	1424	1700	568
Volume to Capacity	0.02	0.09	0.40
Queue Length 95th (m)	0.5	0.0	14.6
Control Delay (s/veh)	0.7	0.0	15.5
Lane LOS	A		C
Approach Delay (s/veh)	0.7	0.0	15.5
Approach LOS			C

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	70	5	4	37	35	12
Future Volume (vph)	70	5	4	37	35	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.992				0.966	
Flt Protected				0.995	0.964	
Satd. Flow (prot)	1725	0	0	1730	1677	0
Flt Permitted				0.995	0.964	
Satd. Flow (perm)	1725	0	0	1730	1677	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	5	4	40	38	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	81	0	0	44	51	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	70	5	4	37	35	12
Future Volume (Veh/h)	70	5	4	37	35	12
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	5	4	40	38	13
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	89	0	126	83	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	89	0	126	83	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	90	100	99	95	98	
cM capacity (veh/h)	782	1085	768	789	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	81	44	51
Volume Left	0	4	38
Volume Right	5	0	13
cSH	796	787	1623
Volume to Capacity	0.10	0.06	0.02
Queue Length 95th (m)	2.6	1.3	0.5
Control Delay (s/veh)	10.0	9.8	5.5
Lane LOS	B	A	A
Approach Delay (s/veh)	10.0	9.8	5.5
Approach LOS	B	A	

Intersection Summary			
Average Delay	8.7		
Intersection Capacity Utilization	15.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	83	146	45	9	1	256	2	46	9	3	61
Future Volume (vph)	16	83	146	45	9	1	256	2	46	9	3	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.919			0.998			0.980			0.887	
Flt Protected		0.997			0.961			0.960			0.994	
Satd. Flow (prot)	0	1650	0	0	1727	0	0	1694	0	0	1588	0
Flt Permitted		0.997			0.961			0.960			0.994	
Satd. Flow (perm)	0	1650	0	0	1727	0	0	1694	0	0	1588	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	90	159	49	10	1	278	2	50	10	3	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	60	0	0	330	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	83	146	45	9	1	256	2	46	9	3	61
Future Volume (Veh/h)	16	83	146	45	9	1	256	2	46	9	3	61
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	90	159	49	10	1	278	2	50	10	3	66
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked												
vC, conflicting volume	11			249			380	313	170	363	392	11
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	11			249			380	313	170	363	392	11
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			96			47	100	94	98	99	94
cM capacity (veh/h)	1608			1317			521	574	874	537	518	1071

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	266	60	330	79
Volume Left	17	49	278	10
Volume Right	159	1	50	66
cSH	1608	1317	555	918
Volume to Capacity	0.01	0.04	0.59	0.09
Queue Length 95th (m)	0.2	0.9	29.4	2.1
Control Delay (s/veh)	0.5	6.5	20.6	9.3
Lane LOS	A	A	C	A
Approach Delay (s/veh)	0.5	6.5	20.6	9.3
Approach LOS			C	A

Intersection Summary					
Average Delay		11.0			
Intersection Capacity Utilization		49.7%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	6	2	37	81	2
Future Volume (vph)	2	6	2	37	81	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.895				0.997	
Flt Protected	0.989			0.998		
Satd. Flow (prot)	1539	0	0	1797	1795	0
Flt Permitted	0.989			0.998		
Satd. Flow (perm)	1539	0	0	1797	1795	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	7	2	40	88	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	0	0	42	90	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	6	2	37	81	2
Future Volume (Veh/h)	2	6	2	37	81	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	7	2	40	88	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	133	89	90			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	133	89	90			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	860	969	1505			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	9	42	90
Volume Left	2	2	0
Volume Right	7	0	2
cSH	942	1505	1700
Volume to Capacity	0.00*	0.00*	0.05
Queue Length 95th (m)	0.2	0.0	0.0
Control Delay (s/veh)	8.9	0.4	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.9	0.4	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	14.4%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	18	18	0	0	54	72	53	0	24	0
Future Volume (vph)	0	0	18	18	0	0	54	72	53	0	24	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.960				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	18	18	0	0	54	72	53	0	24	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	18	0	0	18	0	0	179	0	0	24	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	31.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	18	18	0	0	54	72	53	0	24	0
Future Volume (Veh/h)	0	0	18	18	0	0	54	72	53	0	24	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	18	18	0	0	54	72	53	0	24	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			18			57	45	9	134	54	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			18			57	45	9	134	54	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			94	91	95	100	97	100
cM capacity (veh/h)	1623			1599			911	837	1073	738	828	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	18	18	179	24
Volume Left	0	18	54	0
Volume Right	18	0	53	0
cSH	1623	1599	920	828
Volume to Capacity	0.00	0.01	0.19	0.03
Queue Length 95th (m)	0.0	0.3	5.5	0.7
Control Delay (s/veh)	0.0	7.3	9.9	9.5
Lane LOS		A	A	A
Approach Delay (s/veh)	0.0	7.3	9.9	9.5
Approach LOS			A	A

Intersection Summary				
Average Delay	8.9			
Intersection Capacity Utilization	31.0%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	7	18	60	20	0
Future Volume (vph)	0	7	18	60	20	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.988		
Satd. Flow (prot)	1629	0	0	1861	1883	0
Flt Permitted				0.988		
Satd. Flow (perm)	1629	0	0	1861	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			22.6	24.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	8	20	65	22	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	85	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.8%	ICU Level of Service	A
Analysis Period (min)	15		

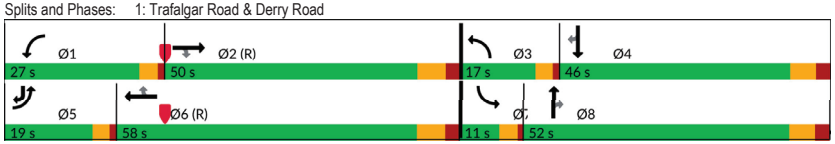
Intersection Sign configuration not allowed in HCM analysis.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
Future Volume (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			157			123			135			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
Shared Lane Traffic (%)												
Lane Group Flow (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	7.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	11.0
Total Split (s)	19.0	50.0	50.0	27.0	58.0	58.0	17.0	52.0	52.0	11.0	46.0	19.0
Total Split (%)	13.6%	35.7%	35.7%	19.3%	41.4%	41.4%	12.1%	37.1%	37.1%	7.9%	32.9%	13.6%
Maximum Green (s)	15.0	43.1	43.1	23.0	51.1	51.1	13.0	45.2	45.2	7.0	39.2	15.0
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	3.0
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	1.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	15.9	46.1	46.1	23.0	53.2	53.2	14.0	47.2	47.2	8.0	41.2	62.9
Actuated g/C Ratio	0.11	0.33	0.33	0.16	0.38	0.38	0.10	0.34	0.34	0.06	0.29	0.45
v/c Ratio	0.66	0.61	0.36	0.75	1.10	0.17	1.26	1.16	0.38	1.01	1.09	0.69
Control Delay (s/veh)	83.0	37.3	9.6	65.3	89.3	7.2	173.7	103.8	11.1	116.7	101.4	35.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.0	37.3	9.6	65.3	89.3	7.2	173.7	103.8	11.1	116.7	101.4	35.1
LOS	F	D	A	E	F	A	F	F	B	F	F	D
Approach Delay (s/veh)		41.2			81.1			106.5			85.9	
Approach LOS		D			F			F			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green		
Natural Cycle: 130		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.26		
Intersection Signal Delay (s/veh): 82.7	Intersection LOS: F	
Intersection Capacity Utilization 96.6%	ICU Level of Service F	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
v/c Ratio	0.66	0.61	0.36	0.75	1.10	0.17	1.26	1.16	0.38	1.01	1.09	0.69
Control Delay (s/veh)	83.0	37.3	9.6	65.3	89.3	7.2	173.7	103.8	11.1	116.7	101.4	35.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.0	37.3	9.6	65.3	89.3	7.2	173.7	103.8	11.1	116.7	101.4	35.1
Queue Length 50th (m)	40.2	90.9	8.8	52.4	~253.5	3.9	~72.2	~236.9	30.4	~26.9	~189.7	98.2
Queue Length 95th (m)	55.1	109.0	21.8	83.5	#279.9	m8.9	m#90.0	m#265.2	m31.3	#52.2	#228.2	155.7
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	385	1474	622	601	1735	684	317	1434	617	183	1251	772
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.61	0.36	0.72	1.10	0.17	1.26	1.16	0.38	1.01	1.09	0.69

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
Future Volume (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	254	903	227	432	1902	118	400	1657	235	185	1368	529
RTOR Reduction (vph)	0	0	105	0	0	73	0	0	89	0	0	73
Lane Group Flow (vph)	254	903	122	432	1902	45	400	1657	146	185	1368	456
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	14.9	44.1	44.1	22.0	51.2	51.2	13.0	45.2	45.2	7.0	39.2	54.1
Effective Green, g (s)	15.9	46.1	46.1	23.0	53.2	53.2	14.0	47.2	47.2	8.0	41.2	58.1
Actuated g/C Ratio	0.11	0.33	0.33	0.16	0.38	0.38	0.10	0.34	0.34	0.06	0.29	0.42
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	4.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	382	1473	516	575	1734	608	317	1434	527	183	1251	649
v/s Ratio Prot	0.08	0.20		c0.12	c0.42		c0.13	c0.39		0.06	0.32	0.08
v/s Ratio Perm			0.08			0.03			0.09			0.21
v/c Ratio	0.66	0.61	0.24	0.75	1.10	0.07	1.26	1.16	0.28	1.01	1.09	0.70
Uniform Delay, d1	59.5	39.5	34.1	55.8	43.4	27.7	63.0	46.4	33.9	66.0	49.4	33.8
Progression Factor	1.25	0.89	0.69	1.05	0.93	1.59	0.84	0.64	0.70	0.83	1.07	1.34
Incremental Delay, d2	5.4	1.8	1.0	4.9	51.1	0.2	130.6	74.5	0.3	62.1	52.7	3.5
Delay (s)	79.6	36.9	24.5	63.4	91.6	44.3	183.5	104.2	24.0	116.9	105.6	48.6
Level of Service	E	D	C	E	F	D	F	F	C	F	F	D
Approach Delay (s/veh)		42.7			84.4			109.8			92.1	
Approach LOS		D			F			F			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	86.4	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.12			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	96.6%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

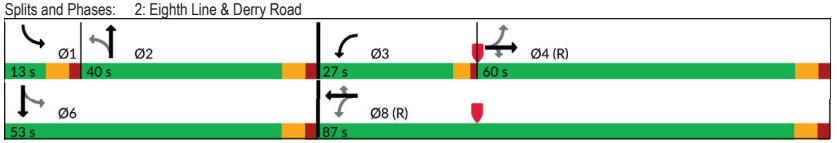
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1092	103	70	2196	8	88	11	71	20	31	8
Future Volume (vph)	10	1092	103	70	2196	8	88	11	71	20	31	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.870			0.969	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1667	0	1825	1862	0
Flt Permitted	0.043			0.183			0.732			0.498		
Satd. Flow (perm)	83	4520	1555	352	4565	1633	1406	1667	0	957	1862	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		71			6	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	10	1092	103	70	2196	8	88	11	71	20	31	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1092	103	70	2196	8	88	82	0	20	39	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		11.0	36.0	
Total Split (s)	60.0	60.0	60.0	27.0	87.0	87.0	40.0	40.0		13.0	53.0	
Total Split (%)	42.9%	42.9%	42.9%	19.3%	62.1%	62.1%	28.6%	28.6%		9.3%	37.9%	
Maximum Green (s)	54.0	54.0	54.0	23.0	81.0	81.0	34.0	34.0		7.0	47.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0			0	
Act Effct Green (s)	96.5	96.5	96.5	107.5	105.5	105.5	14.5	14.5		22.5	22.5	
Actuated g/C Ratio	0.69	0.69	0.69	0.77	0.75	0.75	0.10	0.10		0.16	0.16	
v/c Ratio	0.18	0.35	0.09	0.20	0.64	0.01	0.61	0.35		0.10	0.13	
Control Delay (s/veh)	20.0	15.9	6.3	6.9	10.7	0.0	59.4	16.6		45.3	40.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.0	15.9	6.3	6.9	10.7	0.0	59.4	16.6		45.3	40.4	
LOS	B	B	A	A	B	A	E	B		D	D	
Approach Delay (s/veh)		15.1			10.6			38.7			42.0	
Approach LOS		B			B			D			D	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay (s/veh): 13.8 Intersection LOS: B
Intersection Capacity Utilization 79.7% ICU Level of Service D
Analysis Period (min) 15
* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	10	1092	103	70	2196	8	88	82	20	39
v/c Ratio	0.18	0.35	0.09	0.20	0.64	0.01	0.61	0.35	0.10	0.13
Control Delay (s/veh)	20.0	15.9	6.3	6.9	10.7	0.0	59.4	16.6	45.3	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.0	15.9	6.3	6.9	10.7	0.0	59.4	16.6	45.3	40.4
Queue Length 50th (m)	2.4	116.5	15.5	4.7	122.3	0.0	25.5	12.1	4.6	7.6
Queue Length 95th (m)	m3.2	67.7	12.8	11.0	170.6	0.0	42.8	23.4	11.0	16.7
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	57	3114	1103	512	3440	1248	341	458	198	629
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.35	0.09	0.14	0.64	0.01	0.26	0.18	0.10	0.06

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1092	103	70	2196	8	88	11	71	20	31	8
Future Volume (vph)	10	1092	103	70	2196	8	88	11	71	20	31	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1667		1825	1862	
Flt Permitted	0.04	1.00	1.00	0.18	1.00	1.00	0.73	1.00		0.50	1.00	
Satd. Flow (perm)	82	4520	1555	351	4565	1633	1406	1667		956	1862	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	10	1092	103	70	2196	8	88	11	71	20	31	8
RTOR Reduction (vph)	0	0	34	0	0	2	0	64	0	0	5	0
Lane Group Flow (vph)	10	1092	69	70	2196	6	88	18	0	20	34	0
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	93.3	93.3	93.3	103.1	103.1	103.1	14.5	14.5		24.9	24.9	
Effective Green, g (s)	93.3	93.3	93.3	103.1	103.1	103.1	14.5	14.5		24.9	24.9	
Actuated g/C Ratio	0.67	0.67	0.67	0.74	0.74	0.74	0.10	0.10		0.18	0.18	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	54	3012	1036	319	3361	1202	145	172		197	331	
v/s Ratio Prot		0.24		0.01	c0.48			0.01		0.00	c0.02	
v/s Ratio Perm	0.12		0.04	0.15		0.00	c0.06			0.01		
v/c Ratio	0.19	0.36	0.07	0.22	0.65	0.00	0.61	0.11		0.10	0.10	
Uniform Delay, d1	8.9	10.3	8.2	5.9	9.4	4.9	60.0	56.9		48.0	48.2	
Progression Factor	0.88	1.45	2.62	1.00	1.00	1.00	0.71	0.82		1.00	1.00	
Incremental Delay, d2	6.9	0.3	0.1	0.3	1.0	0.0	6.9	0.3		0.2	0.1	
Delay (s)	14.7	15.2	21.4	6.2	10.4	4.9	49.6	46.7		48.2	48.3	
Level of Service	B	B	C	A	B	A	D	D		D	D	
Approach Delay (s/veh)		15.7			10.2			48.2			48.3	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.65				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0		
Intersection Capacity Utilization	79.7%	ICU Level of Service	D		
Analysis Period (min)	15				

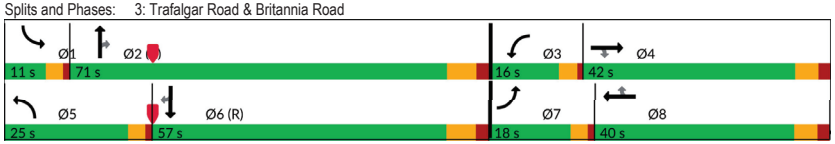
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
Future Volume (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			247			125			130			215
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
Shared Lane Traffic (%)												
Lane Group Flow (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	18.0	42.0	42.0	16.0	40.0	40.0	25.0	71.0	71.0	11.0	57.0	57.0
Total Split (%)	12.9%	30.0%	30.0%	11.4%	28.6%	28.6%	17.9%	50.7%	50.7%	7.9%	40.7%	40.7%
Maximum Green (s)	14.0	36.0	36.0	12.0	34.0	34.0	21.0	64.0	64.0	7.0	50.0	50.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	15.0	37.4	37.4	12.2	34.6	34.6	23.4	67.0	67.0	8.4	52.0	52.0
Actuated g/C Ratio	0.11	0.27	0.27	0.09	0.25	0.25	0.17	0.48	0.48	0.06	0.37	0.37
v/c Ratio	1.03	0.59	0.41	0.57	0.82	0.31	0.94	0.86	0.24	0.62	1.01	0.78
Control Delay (s/veh)	118.5	46.8	6.7	68.8	46.1	8.6	59.0	52.0	22.7	103.5	41.5	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	118.5	46.8	6.7	68.8	46.1	8.6	59.0	52.0	22.7	103.5	41.5	11.7
LOS	F	D	A	E	D	A	E	D	C	F	D	B
Approach Delay (s/veh)		57.9			44.9			51.1			37.5	
Approach LOS		E			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 135			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 47.0		Intersection LOS: D	
Intersection Capacity Utilization 87.1%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
v/c Ratio	1.03	0.59	0.41	0.57	0.82	0.31	0.94	0.86	0.24	0.62	1.01	0.78
Control Delay (s/veh)	118.5	46.8	6.7	68.8	46.1	8.6	59.0	52.0	22.7	103.5	41.5	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	118.5	46.8	6.7	68.8	46.1	8.6	59.0	52.0	22.7	103.5	41.5	11.7
Queue Length 50th (m)	~58.2	71.7	0.0	24.4	102.1	14.2	~76.6	188.9	25.7	17.9	~205.0	94.0
Queue Length 95th (m)	#93.0	88.0	20.6	29.7	121.2	19.7	m67.1	m164.8	m21.4	m20.5	m178.7	m104.7
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	327	1214	610	328	1173	489	535	2076	817	186	1595	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.58	0.40	0.53	0.79	0.30	0.94	0.86	0.24	0.62	1.01	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
Future Volume (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	338	700	247	175	926	148	504	1780	194	115	1608	547
RTOR Reduction (vph)	0	0	181	0	0	94	0	0	68	0	0	135
Lane Group Flow (vph)	338	700	66	175	926	54	504	1780	126	115	1608	412
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	14.0	35.4	35.4	11.2	32.6	32.6	22.4	65.0	65.0	7.4	50.0	50.0
Effective Green, g (s)	15.0	37.4	37.4	12.2	34.6	34.6	23.4	67.0	67.0	8.4	52.0	52.0
Actuated g/C Ratio	0.11	0.27	0.27	0.09	0.25	0.25	0.17	0.48	0.48	0.06	0.37	0.37
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	327	1195	423	308	1128	380	535	2075	749	186	1595	570
v/s Ratio Prot	c0.11	c0.16		0.05	c0.20		c0.16	0.41		0.04	c0.37	
v/s Ratio Perm			0.04			0.03			0.08			0.27
v/c Ratio	1.03	0.59	0.16	0.57	0.82	0.14	0.94	0.86	0.17	0.62	1.01	0.72
Uniform Delay, d1	62.5	44.6	39.2	61.4	49.8	41.1	57.6	32.3	20.7	64.2	44.0	37.8
Progression Factor	1.00	1.00	1.00	1.00	0.80	0.70	0.95	1.57	2.98	1.49	0.50	0.31
Incremental Delay, d2	58.7	0.7	0.2	2.3	4.7	0.2	3.9	0.5	0.0	3.2	18.3	4.2
Delay (s)	121.2	45.3	39.4	63.9	44.3	28.9	58.7	51.1	61.8	98.6	40.2	15.9
Level of Service	F	D	D	E	D	C	E	D	E	F	D	B
Approach Delay (s/veh)		64.1			45.2			53.5			37.3	
Approach LOS		E			D			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	48.9	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.93			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	87.1%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

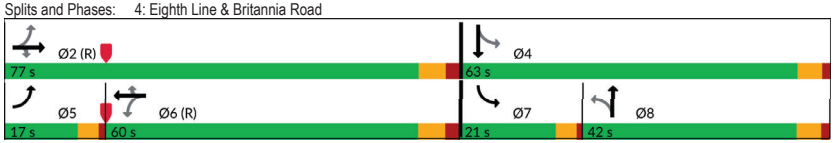
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	914	15	29	1173	46	39	105	45	64	100	42
Future Volume (vph)	18	914	15	29	1173	46	39	105	45	64	100	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.955			0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1813	0	1825	1786	0
Flt Permitted	0.160			0.263			0.666			0.359		
Satd. Flow (perm)	307	4476	1328	505	4520	1633	1279	1813	0	690	1786	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		15			18	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	18	914	15	29	1173	46	39	105	45	64	100	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	914	15	29	1173	46	39	150	0	64	142	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	17.0	77.0	77.0	60.0	60.0	60.0	42.0	42.0		21.0	63.0	
Total Split (%)	12.1%	55.0%	55.0%	42.9%	42.9%	42.9%	30.0%	30.0%		15.0%	45.0%	
Maximum Green (s)	12.5	70.2	70.2	53.2	53.2	53.2	36.3	36.3		16.5	57.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	100.3	98.0	98.0	93.6	93.6	93.6	17.3	17.3		30.7	29.5	
Actuated g/C Ratio	0.72	0.70	0.70	0.67	0.67	0.67	0.12	0.12		0.22	0.21	
v/c Ratio	0.06	0.29	0.02	0.09	0.39	0.04	0.25	0.64		0.28	0.36	
Control Delay (s/veh)	8.4	7.4	0.2	13.2	12.7	0.1	56.6	60.4		48.2	46.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.4	7.4	0.2	13.2	12.7	0.1	56.6	60.4		48.2	46.3	
LOS	A	A	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		7.3			12.2			59.6			46.8	
Approach LOS		A			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 16.6		Intersection LOS: B	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	18	914	15	29	1173	46	39	150	64	142
v/c Ratio	0.06	0.29	0.02	0.09	0.39	0.04	0.25	0.64	0.28	0.36
Control Delay (s/veh)	8.4	7.4	0.2	13.2	12.7	0.1	56.6	60.4	48.2	46.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.4	7.4	0.2	13.2	12.7	0.1	56.6	60.4	48.2	46.3
Queue Length 50th (m)	1.1	24.7	0.0	2.4	51.9	0.0	9.4	34.8	16.7	34.4
Queue Length 95th (m)	m2.4	31.4	m0.1	9.5	96.0	0.3	m15.6	m48.2	27.2	50.8
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	355	3132	946	337	3021	1121	331	481	285	741
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.29	0.02	0.09	0.39	0.04	0.12	0.31	0.22	0.19

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	914	15	29	1173	46	39	105	45	64	100	42
Future Volume (vph)	18	914	15	29	1173	46	39	105	45	64	100	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1813		1825	1786	
Flt Permitted	0.16	1.00	1.00	0.26	1.00	1.00	0.67	1.00		0.36	1.00	
Satd. Flow (perm)	307	4476	1328	506	4520	1633	1280	1813		691	1786	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	18	914	15	29	1173	46	39	105	45	64	100	42
RTOR Reduction (vph)	0	0	5	0	0	16	0	13	0	0	14	0
Lane Group Flow (vph)	18	914	10	29	1173	30	39	137	0	64	128	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	97.0	97.0	97.0	89.9	89.9	89.9	17.3	17.3		30.5	30.5	
Effective Green, g (s)	97.0	97.0	97.0	89.9	89.9	89.9	17.3	17.3		30.5	30.5	
Actuated g/C Ratio	0.69	0.69	0.69	0.64	0.64	0.64	0.12	0.12		0.22	0.22	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	240	3101	920	324	2902	1048	158	224		221	389	
v/s Ratio Prot	0.00	c0.20			c0.26			c0.08		0.02	c0.07	
v/s Ratio Perm	0.05		0.01	0.06		0.02	0.03			0.05		
v/c Ratio	0.08	0.29	0.01	0.09	0.40	0.03	0.25	0.61		0.29	0.33	
Uniform Delay, d1	7.7	8.3	6.7	9.5	12.1	9.1	55.5	58.2		44.8	46.1	
Progression Factor	1.03	0.81	1.00	1.00	1.00	1.00	0.98	0.97		1.10	1.12	
Incremental Delay, d2	0.1	0.2	0.0	0.5	0.4	0.0	0.6	3.8		0.7	0.5	
Delay (s)	8.0	6.9	6.7	10.1	12.5	9.2	55.0	60.2		49.9	52.1	
Level of Service	A	A	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		7.0			12.3			59.1			51.5	
Approach LOS		A			B			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	16.9	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.44				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		21.5	
Intersection Capacity Utilization	64.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

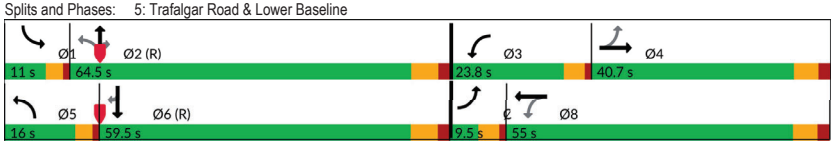
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	316	52	279	446	367	254	2117	319	256	1728	73
Future Volume (vph)	58	316	52	279	446	367	254	2117	319	256	1728	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt		0.979			0.932				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	1839	0	1807	1757	0	1745	4378	1581	3319	4295	1551
Flt Permitted	0.106			0.209			0.071			0.950		
Satd. Flow (perm)	196	1839	0	398	1757	0	130	4378	1581	3319	4295	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			33				166			157
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	58	316	52	279	446	367	254	2117	319	256	1728	73
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	368	0	279	813	0	254	2117	319	256	1728	73
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		7.0	10.0		7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2		11.5	24.2		11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	40.7		23.8	55.0		16.0	64.5	64.5	11.0	59.5	59.5
Total Split (%)	6.8%	29.1%		17.0%	39.3%		11.4%	46.1%	46.1%	7.9%	42.5%	42.5%
Maximum Green (s)	5.0	34.5		19.3	48.8		12.0	57.9	57.9	7.0	52.9	52.9
Yellow Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	44.5	37.8		61.0	52.7		72.5	59.9	59.9	8.0	54.9	54.9
Actuated g/C Ratio	0.32	0.27		0.44	0.38		0.52	0.43	0.43	0.06	0.39	0.39
v/c Ratio	0.45	0.74		0.77	1.19		1.17	1.13	0.41	1.35	1.03	0.10
Control Delay (s/veh)	36.2	56.1		51.4	144.1		149.0	103.4	14.4	216.2	84.9	7.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.2	56.1		51.4	144.1		149.0	103.4	14.4	216.2	84.9	7.3
LOS	D	E		D	F		F	F	B	F	F	A
Approach Delay (s/veh)		53.4			120.4			97.2			98.5	
Approach LOS		D			F			F			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.35		
Intersection Signal Delay (s/veh): 98.7	Intersection LOS: F	
Intersection Capacity Utilization 112.3%	ICU Level of Service H	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	58	368	279	813	254	2117	319	256	1728	73
v/c Ratio	0.45	0.74	0.77	1.19	1.17	1.13	0.41	1.35	1.03	0.10
Control Delay (s/veh)	36.2	56.1	51.4	144.1	149.0	103.4	14.4	216.2	84.9	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.2	56.1	51.4	144.1	149.0	103.4	14.4	216.2	84.9	7.3
Queue Length 50th (m)	9.6	94.5	74.8	~271.8	~67.5	~289.3	27.6	~49.7	~192.5	0.6
Queue Length 95th (m)	18.7	132.1	m93.6	m#360.2	#122.3	#322.1	52.0	m#56.2	m#218.2	m2.6
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	129	500	377	681	217	1873	771	189	1684	703
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.74	0.74	1.19	1.17	1.13	0.41	1.35	1.03	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	316	52	279	446	367	254	2117	319	256	1728	73
Future Volume (vph)	58	316	52	279	446	367	254	2117	319	256	1728	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	0.98		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1755	1838		1807	1758		1745	4378	1581	3319	4295	1551
Flt Permitted	0.11	1.00		0.21	1.00		0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	196	1838		397	1758		131	4378	1581	3319	4295	1551
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	58	316	52	279	446	367	254	2117	319	256	1728	73
RTOR Reduction (vph)	0	4	0	0	21	0	0	0	96	0	0	45
Lane Group Flow (vph)	58	364	0	279	792	0	254	2117	223	256	1728	28
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2			6
Actuated Green, G (s)	40.7	36.7		59.2	50.7		68.0	57.0	57.0	7.0	52.0	52.0
Effective Green, g (s)	42.7	38.7		60.2	52.7		69.0	59.0	59.0	8.0	54.0	54.0
Actuated g/C Ratio	0.31	0.28		0.43	0.38		0.49	0.42	0.42	0.06	0.39	0.39
Clearance Time (s)	4.5	6.2		4.5	6.2		4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	115	508		362	661		214	1845	666	189	1656	598
v/s Ratio Prot	0.02	0.20		c0.10	c0.45		c0.11	0.48		c0.08	0.40	
v/s Ratio Perm	0.14			0.23			c0.47		0.14			0.02
v/c Ratio	0.50	0.72		0.77	1.20		1.19	1.15	0.33	1.35	1.04	0.05
Uniform Delay, d1	39.2	45.7		30.0	43.7		44.0	40.5	27.3	66.0	43.0	26.9
Progression Factor	1.00	1.00		1.60	1.43		1.00	1.00	1.00	0.84	1.56	1.00
Incremental Delay, d2	3.5	5.9		5.7	98.0		121.2	73.2	1.4	174.4	27.8	0.1
Delay (s)	42.6	51.6		53.7	160.2		165.2	113.7	28.6	229.9	94.8	27.0
Level of Service	D	D		D	F		F	F	C	F	F	C
Approach Delay (s/veh)		50.4			133.0			108.5			109.2	
Approach LOS		D			F			F			F	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	109.0	HCM 2000 Level of Service		F	
HCM 2000 Volume to Capacity ratio	1.20				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		15.3	
Intersection Capacity Utilization	112.3%	ICU Level of Service		H	
Analysis Period (min)	15				

c Critical Lane Group

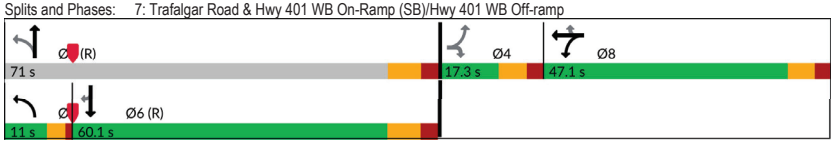
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	17	750	27	1396	7	1084	0	0	968	45
Future Volume (vph)	17	0	17	750	27	1396	7	1084	0	0	968	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	4309	0	0	4350	1306
Flt Permitted	0.597			0.950			0.113					
Satd. Flow (perm)	1147	0	1633	3372	1921	2737	217	4309	0	0	4350	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			279						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Adj. Flow (vph)	17	0	17	750	27	1396	7	1084	0	0	968	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	17	750	27	1396	7	1084	0	0	968	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.7		10.7	61.4	61.4	61.4	52.0	47.9			45.7	45.7
Actuated g/C Ratio	0.08		0.08	0.45	0.45	0.45	0.38	0.35			0.34	0.34
v/c Ratio	0.19		0.07	0.49	0.03	1.00	0.04	0.71			0.66	0.09
Control Delay (s/veh)	63.0		0.5	30.4	27.4	54.9	23.1	40.3			40.6	0.3
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.0		0.5	30.4	27.4	54.9	23.1	40.3			40.6	0.3
LOS	E		A	C	C	D	C	D			D	A
Approach Delay (s/veh)		31.8			46.1			40.2			38.8	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay (s/veh): 42.8		Intersection LOS: D	
Intersection Capacity Utilization 89.1%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp

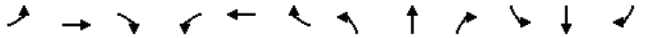


Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	17	750	27	1396	7	1084	968	45
v/c Ratio	0.19	0.07	0.49	0.03	1.00	0.04	0.71	0.66	0.09
Control Delay (s/veh)	63.0	0.5	30.4	27.4	54.9	23.1	40.3	40.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.0	0.5	30.4	27.4	54.9	23.1	40.3	40.6	0.3
Queue Length 50th (m)	4.4	0.0	80.2	4.3	~218.5	1.2	111.0	94.7	0.0
Queue Length 95th (m)	12.1	0.0	118.0	12.2	#303.9	3.8	114.7	113.9	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	90	248	1527	870	1392	166	2003	1669	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	0.49	0.03	1.00	0.04	0.54	0.58	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	17	750	27	1396	7	1084	0	0	968	45
Future Volume (vph)	17	0	17	750	27	1396	7	1084	0	0	968	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	4309			4350	1306
Flt Permitted	0.60		1.00	0.95	1.00	1.00	0.11	1.00			1.00	1.00
Satd. Flow (perm)	1147		1633	3372	1921	2737	217	4309			4350	1306
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	17	750	27	1396	7	1084	0	0	968	45
RTOR Reduction (vph)	0	0	16	0	0	153	0	0	0	0	0	32
Lane Group Flow (vph)	17	0	1	750	27	1243	7	1084	0	0	968	13
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.7		6.7	61.4	61.4	61.4	44.9	44.9			39.5	39.5
Effective Green, g (s)	6.7		6.7	61.4	61.4	61.4	44.9	44.9			39.5	39.5
Actuated g/C Ratio	0.05		0.05	0.45	0.45	0.45	0.33	0.33			0.29	0.29
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		80	1527	870	1240	88	1427			1268	380
v/s Ratio Prot				0.22	0.01		0.00	c0.25			0.22	
v/s Ratio Perm	c0.01		0.00			c0.45	0.03					0.01
v/c Ratio	0.30		0.01	0.49	0.03	1.00	0.08	0.76			0.76	0.03
Uniform Delay, d1	62.1		61.2	26.1	20.6	37.1	32.5	40.5			43.7	34.4
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.1		0.1	0.1	0.0	26.2	0.1	3.8			4.4	0.2
Delay (s)	65.2		61.3	26.2	20.6	63.3	32.6	44.3			48.1	34.5
Level of Service	E		E	C	C	E	C	D			D	C
Approach Delay (s/veh)		63.3			49.9			44.3			47.5	
Approach LOS		E			D			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	48.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

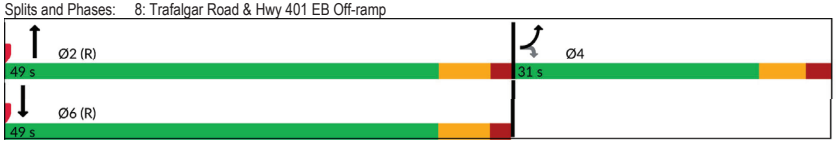
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	586	0	1409	1294	0
Future Volume (vph)	147	586	0	1409	1294	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.900	0.850				
Flt Protected	0.984					
Satd. Flow (prot)	2947	1327	0	4309	4350	0
Flt Permitted	0.984					
Satd. Flow (perm)	2947	1327	0	4309	4350	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	39	39				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Adj. Flow (vph)	147	586	0	1409	1294	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	440	293	0	1409	1294	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	20.2	20.2		45.8	45.8	
Actuated g/C Ratio	0.25	0.25		0.57	0.57	
v/c Ratio	0.57	0.80		0.57	0.52	
Control Delay (s/veh)	25.9	40.7		12.9	12.2	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	25.9	40.7		12.9	12.2	
LOS	C	D		B	B	
Approach Delay (s/veh)	31.8			12.9	12.2	
Approach LOS	C			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 16.7		Intersection LOS: B	
Intersection Capacity Utilization 60.9%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	440	293	1409	1294
v/c Ratio	0.57	0.80	0.57	0.52
Control Delay (s/veh)	25.9	40.7	12.9	12.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.9	40.7	12.9	12.2
Queue Length 50th (m)	29.4	43.0	56.6	49.4
Queue Length 95th (m)	41.1	72.0	81.5	71.5
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	927	432	2490	2514
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.47	0.68	0.57	0.51

Intersection Summary

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	586	0	1409	1294	0
Future Volume (vph)	147	586	0	1409	1294	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2946	1327		4309	4350	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2946	1327		4309	4350	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	586	0	1409	1294	0
RTOR Reduction (vph)	29	29	0	0	0	0
Lane Group Flow (vph)	411	264	0	1409	1294	0
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	20.2	20.2		45.8	45.8	
Effective Green, g (s)	20.2	20.2		45.8	45.8	
Actuated g/C Ratio	0.25	0.25		0.57	0.57	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	743	335		2466	2490	
v/s Ratio Prot	0.14			c0.33	0.30	
v/s Ratio Perm		c0.20				
v/c Ratio	0.55	0.79		0.57	0.52	
Uniform Delay, d1	26.0	27.9		10.9	10.4	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	11.6		1.0	0.8	
Delay (s)	26.9	39.5		11.8	11.2	
Level of Service	C	D		B	B	
Approach Delay (s/veh)	31.9			11.8	11.2	
Approach LOS	C			B	B	

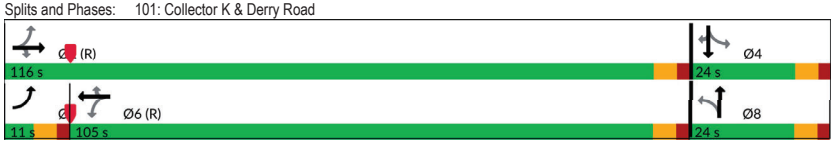
Intersection Summary				
HCM 2000 Control Delay (s/veh)	15.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.64			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	60.9%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1364	221	21	3211	12	152	0	6	18	0	10
Future Volume (vph)	64	1364	221	21	3211	12	152	0	6	18	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.037			0.153			0.757			0.754		
Satd. Flow (perm)	70	4520	1601	288	4520	1601	1426	1601	0	1420	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221			70		110				70
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	64	1364	221	21	3211	12	152	0	6	18	0	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	1364	221	21	3211	12	152	6	0	18	0	10
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	116.0	116.0	105.0	105.0	105.0	24.0	24.0		24.0	24.0	24.0
Total Split (%)	7.9%	82.9%	82.9%	75.0%	75.0%	75.0%	17.1%	17.1%		17.1%	17.1%	17.1%
Maximum Green (s)	5.0	110.0	110.0	99.0	99.0	99.0	18.0	18.0		18.0	18.0	18.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		None	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	110.8	110.8	110.8	102.0	102.0	102.0	17.2	17.2		17.2		17.2
Actuated g/C Ratio	0.79	0.79	0.79	0.73	0.73	0.73	0.12	0.12		0.12		0.12
v/c Ratio	0.54	0.38	0.17	0.10	0.98	0.01	0.87	0.02		0.10		0.04
Control Delay (s/veh)	32.4	4.8	0.7	3.8	17.1	0.0	100.4	0.2		55.6		0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	32.4	4.8	0.7	3.8	17.1	0.0	100.4	0.2		55.6		0.3
LOS	C	A	A	A	B	A	F	A		E		A
Approach Delay (s/veh)		5.3			17.0			96.6			35.9	
Approach LOS		A			B			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 15.8		Intersection LOS: B	
Intersection Capacity Utilization 89.6%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	64	1364	221	21	3211	12	152	6	18	10
v/c Ratio	0.54	0.38	0.17	0.10	0.98	0.01	0.87	0.02	0.10	0.04
Control Delay (s/veh)	32.4	4.8	0.7	3.8	17.1	0.0	100.4	0.2	55.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.4	4.8	0.7	3.8	17.1	0.0	100.4	0.2	55.6	0.3
Queue Length 50th (m)	3.4	41.8	0.0	0.9	~107.2	0.0	42.3	0.0	4.6	0.0
Queue Length 95th (m)	#18.6	48.3	4.9	m0.9	m67.0	m0.0	#80.7	0.0	12.4	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	118	3576	1313	209	3292	1185	183	301	182	266
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.38	0.17	0.10	0.98	0.01	0.83	0.02	0.10	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	1364	221	21	3211	12	152	0	6	18	0	10
Future Volume (vph)	64	1364	221	21	3211	12	152	0	6	18	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601		1789		1601
Flt Permitted	0.04	1.00	1.00	0.15	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	71	4520	1601	289	4520	1601	1426	1601		1420		1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	64	1364	221	21	3211	12	152	0	6	18	0	10
RTOR Reduction (vph)	0	0	46	0	0	3	0	5	0	0	0	9
Lane Group Flow (vph)	64	1364	175	21	3211	9	152	1	0	18	0	1
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	110.8	110.8	110.8	100.8	100.8	100.8	17.2	17.2		17.2		17.2
Effective Green, g (s)	110.8	110.8	110.8	100.8	100.8	100.8	17.2	17.2		17.2		17.2
Actuated g/C Ratio	0.79	0.79	0.79	0.72	0.72	0.72	0.12	0.12		0.12		0.12
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	105	3577	1267	208	3254	1152	175	196		174		196
v/s Ratio Prot	0.02	c0.30			c0.71			0.00				
v/s Ratio Perm	0.47		0.11	0.07		0.01	c0.11			0.01		0.00
v/c Ratio	0.61	0.38	0.14	0.10	0.99	0.01	0.87	0.00		0.10		0.01
Uniform Delay, d1	42.2	4.4	3.4	5.9	19.0	5.5	60.3	53.9		54.5		53.9
Progression Factor	1.00	1.00	1.00	0.50	0.54	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	9.6	0.3	0.2	0.4	7.5	0.0	33.6	0.0		0.3		0.0
Delay (s)	51.9	4.7	3.6	3.3	17.7	5.5	93.9	53.9		54.8		53.9
Level of Service	D	A	A	A	B	A	F	D		D		D
Approach Delay (s/veh)		6.4			17.6			92.4			54.5	
Approach LOS		A			B			F			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	16.5	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.96				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	89.6%	ICU Level of Service		E	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1249	223	0	2406	8	0	0	92	0	0	43
Future Volume (vph)	0	1249	223	0	2406	8	0	0	92	0	0	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	4520	1601	0	4520	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	4520	1601	0	4520	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1249	223	0	2406	8	0	0	92	0	0	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1249	223	0	2414	0	0	0	92	0	0	43
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	56.7%	ICU Level of Service B	
Analysis Period (min)	15		

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1249	223	0	2406	8	0	0	92	0	0	43
Future Volume (Veh/h)	0	1249	223	0	2406	8	0	0	92	0	0	43
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1249	223	0	2406	8	0	0	92	0	0	43
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.72			0.86			0.80	0.80	0.86	0.80	0.80	0.72
vC, conflicting volume	2414			1472			2094	3663	416	2918	3882	806
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1618			966			260	2232	0	1296	2508	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	90	100	100	95
cM capacity (veh/h)	289			607			505	34	929	86	22	785

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	416	416	416	223	962	962	489	92	43
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	223	0	0	8	92	43
cSH	1700	1700	1700	1700	1700	1700	1700	929	785
Volume to Capacity	0.24	0.24	0.24	0.13	0.57	0.57	0.29	0.10	0.05
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.3
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	9.9
Lane LOS								A	A
Approach Delay (s/veh)	0.0				0.0			9.3	9.9
Approach LOS								A	A

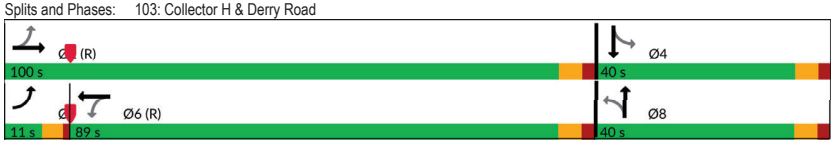
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	56.7%	ICU Level of Service	B	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	1191	129	29	2351	13	108	0	14	25	11	52
Future Volume (vph)	58	1191	129	29	2351	13	108	0	14	25	11	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.999			0.985			0.920	
Flt Protected	0.950			0.950				0.958			0.986	
Satd. Flow (prot)	1789	4452	0	1789	4516	0	0	1777	0	0	1709	0
Flt Permitted	0.037			0.162				0.622			0.924	
Satd. Flow (perm)	70	4452	0	305	4516	0	0	1154	0	0	1601	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			1			58			49	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	58	1191	129	29	2351	13	108	0	14	25	11	52
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	1320	0	29	2364	0	0	122	0	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	9.5	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	11.0	100.0		89.0	89.0		40.0	40.0		40.0	40.0	
Total Split (%)	7.9%	71.4%		63.6%	63.6%		28.6%	28.6%		28.6%	28.6%	
Maximum Green (s)	6.5	94.0		83.0	83.0		34.0	34.0		34.0	34.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)		9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	115.6	114.1		105.0	105.0			13.9			13.9	
Actuated g/C Ratio	0.83	0.82		0.75	0.75			0.10			0.10	
v/c Ratio	0.42	0.36		0.13	0.70			0.73			0.43	
Control Delay (s/veh)	29.3	5.9		9.9	10.3			56.5			32.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	29.3	5.9		9.9	10.3			56.5			32.7	
LOS	C	A		A	B			E			C	
Approach Delay (s/veh)		6.8			10.3			56.5			32.7	
Approach LOS		A			B			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 11.0		Intersection LOS: B	
Intersection Capacity Utilization 71.7%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	58	1320	29	2364	122	88
v/c Ratio	0.42	0.36	0.13	0.70	0.73	0.43
Control Delay (s/veh)	29.3	5.9	9.9	10.3	56.5	32.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.3	5.9	9.9	10.3	56.5	32.7
Queue Length 50th (m)	7.3	27.5	1.7	62.0	17.8	10.3
Queue Length 95th (m)	m18.1	m47.5	m5.0	126.9	38.4	26.5
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	143	3631	228	3386	324	425
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.36	0.13	0.70	0.38	0.21

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	1191	129	29	2351	13	108	0	14	25	11	52
Future Volume (vph)	58	1191	129	29	2351	13	108	0	14	25	11	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.98			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4454		1789	4517			1776			1709	
Flt Permitted	0.04	1.00		0.16	1.00			0.62			0.92	
Satd. Flow (perm)	69	4454		305	4517			1154			1602	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	58	1191	129	29	2351	13	108	0	14	25	11	52
RTOR Reduction (vph)	0	4	0	0	0	0	0	52	0	0	44	0
Lane Group Flow (vph)	58	1316	0	29	2364	0	0	70	0	0	44	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	114.1	114.1		104.1	104.1			13.9			13.9	
Effective Green, g (s)	114.1	114.1		104.1	104.1			13.9			13.9	
Actuated g/C Ratio	0.82	0.82		0.74	0.74			0.10			0.10	
Clearance Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	123	3630		226	3358			114			159	
v/s Ratio Prot	0.02	c0.30			c0.52							
v/s Ratio Perm	0.36			0.10				c0.06			0.03	
v/c Ratio	0.47	0.36		0.13	0.70			0.61			0.28	
Uniform Delay, d1	15.4	3.4		5.1	9.7			60.5			58.4	
Progression Factor	1.73	1.54		1.25	0.88			1.00			0.94	
Incremental Delay, d2	2.5	0.2		0.9	1.0			9.4			0.9	
Delay (s)	29.1	5.5		7.3	9.4			69.8			55.7	
Level of Service	C	A		A	A			E			E	
Approach Delay (s/veh)		6.5			9.4			69.8			55.7	
Approach LOS		A			A			E			E	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	11.3	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.68				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		16.5	
Intersection Capacity Utilization	71.7%	ICU Level of Service		C	
Analysis Period (min)	15				

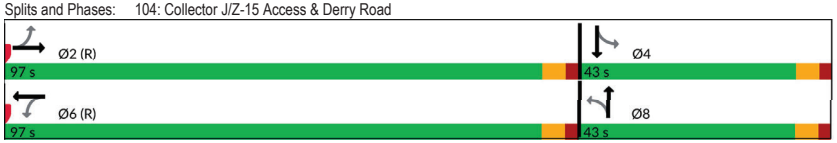
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1183	213	18	2263	13	144	0	20	26	0	101
Future Volume (vph)	33	1183	213	18	2263	13	144	0	20	26	0	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.999			0.984			0.893	
Flt Protected	0.950			0.950				0.958			0.990	
Satd. Flow (prot)	1789	4416	0	1789	4516	0	0	1775	0	0	1665	0
Flt Permitted	0.038			0.133				0.564			0.931	
Satd. Flow (perm)	72	4416	0	250	4516	0	0	1045	0	0	1566	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			1			23			23	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	33	1183	213	18	2263	13	144	0	20	26	0	101
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	1396	0	18	2276	0	0	164	0	0	127	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	97.0	97.0		97.0	97.0		43.0	43.0		43.0	43.0	
Total Split (%)	69.3%	69.3%		69.3%	69.3%		30.7%	30.7%		30.7%	30.7%	
Maximum Green (s)	91.0	91.0		91.0	91.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	105.4	105.4		105.4	105.4			22.6			22.6	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.16			0.16	
v/c Ratio	0.61	0.42		0.10	0.67			0.87			0.47	
Control Delay (s/veh)	69.2	6.8		8.1	8.8			87.4			47.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	69.2	6.8		8.1	8.8			87.4			47.2	
LOS	E	A		A	A			F			D	
Approach Delay (s/veh)		8.2			8.8			87.4			47.2	
Approach LOS		A			A			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 13.0		Intersection LOS: B	
Intersection Capacity Utilization 69.9%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	33	1396	18	2276	164	127
v/c Ratio	0.61	0.42	0.10	0.67	0.87	0.47
Control Delay (s/veh)	69.2	6.8	8.1	8.8	87.4	47.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	69.2	6.8	8.1	8.8	87.4	47.2
Queue Length 50th (m)	8.3	79.3	1.1	109.1	39.6	26.7
Queue Length 95th (m)	#28.4	20.5	m2.9	100.1	62.3	43.5
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	54	3334	188	3399	293	430
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.42	0.10	0.67	0.56	0.30

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

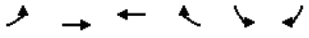
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	1183	213	18	2263	13	144	0	20	26	0	101
Future Volume (vph)	33	1183	213	18	2263	13	144	0	20	26	0	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.98			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4417		1789	4516			1775			1664	
Flt Permitted	0.04	1.00		0.13	1.00			0.56			0.93	
Satd. Flow (perm)	71	4417		250	4516			1045			1565	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	33	1183	213	18	2263	13	144	0	20	26	0	101
RTOR Reduction (vph)	0	10	0	0	0	0	0	19	0	0	19	0
Lane Group Flow (vph)	33	1386	0	18	2276	0	0	145	0	0	108	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	105.4	105.4		105.4	105.4			22.6			22.6	
Effective Green, g (s)	105.4	105.4		105.4	105.4			22.6			22.6	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.16			0.16	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	53	3325		188	3399			168			252	
v/s Ratio Prot		0.31			c0.50							
v/s Ratio Perm	0.46			0.07				c0.14			0.07	
v/c Ratio	0.62	0.42		0.10	0.67			0.86			0.43	
Uniform Delay, d1	8.0	6.2		4.6	8.6			57.2			52.9	
Progression Factor	1.59	0.95		1.06	0.81			1.00			1.00	
Incremental Delay, d2	43.2	0.4		0.8	0.8			33.6			1.2	
Delay (s)	56.0	6.3		5.7	7.9			90.8			54.0	
Level of Service	E	A		A	A			F			D	
Approach Delay (s/veh)		7.5			7.8			90.8			54.0	
Approach LOS		A			A			F			D	

Intersection Summary

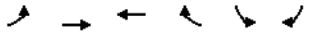
HCM 2000 Control Delay (s/veh)	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1382	3196	30	0	27
Future Volume (vph)	0	1382	3196	30	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	*0.80	*0.80	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	4520	3014	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	4520	3014	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1382	3196	30	0	27
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1382	3196	30	0	27
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	98.3%	ICU Level of Service	F
Analysis Period (min)	15		
* User Entered Value			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1382	3196	30	0	27
Future Volume (Veh/h)	0	1382	3196	30	0	27
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1382	3196	30	0	27
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.62				0.65	0.62
vC, conflicting volume	3226				3657	1598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3367				3290	720
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	88
cM capacity (veh/h)	49				4	228

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	461	461	461	1598	1598	30	27
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	30	27
cSH	1700	1700	1700	1700	1700	1700	228
Volume to Capacity	0.27	0.27	0.27	0.94	0.94	0.02	0.12
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	3.0
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	22.9
Lane LOS							C
Approach Delay (s/veh)	0.0			0.0			22.9
Approach LOS							C

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	98.3%	ICU Level of Service		F
Analysis Period (min)	15			

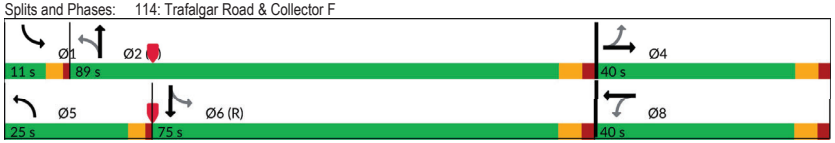
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	47	47	42	45	93	68	1410	152	140	1991	95
Future Volume (vph)	39	47	47	42	45	93	68	1410	152	140	1991	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.925			0.899			0.985			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1666	0	1652	1619	0	1711	4355	0	1711	4390	0
Flt Permitted	0.430			0.641			0.050			0.096		
Satd. Flow (perm)	748	1666	0	1114	1619	0	90	4355	0	173	4390	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			70			19			6	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	39	47	47	42	45	93	68	1410	152	140	1991	95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	94	0	42	138	0	68	1562	0	140	2086	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	12.8	12.8		12.8	12.8		108.9	99.3		117.0	105.8	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.78	0.71		0.84	0.76	
v/c Ratio	0.57	0.51		0.41	0.65		0.43	0.50		0.51	0.63	
Control Delay (s/veh)	91.2	48.0		71.2	44.3		34.3	8.0		19.7	5.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	91.2	48.0		71.2	44.3		34.3	8.0		19.7	5.4	
LOS	F	D		E	D		C	A		B	A	
Approach Delay (s/veh)		60.7			50.6			9.1			6.3	
Approach LOS		E			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 11.1		Intersection LOS: B	
Intersection Capacity Utilization 81.4%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	39	94	42	138	68	1562	140	2086
v/c Ratio	0.57	0.51	0.41	0.65	0.43	0.50	0.51	0.63
Control Delay (s/veh)	91.2	48.0	71.2	44.3	34.3	8.0	19.7	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	91.2	48.0	71.2	44.3	34.3	8.0	19.7	5.4
Queue Length 50th (m)	10.7	16.4	11.3	18.1	7.5	1.0	9.3	32.5
Queue Length 95th (m)	m22.5	33.3	23.3	39.6	m6.1	m165.2	33.3	64.8
Internal Link Dist (m)		200.2		176.3		308.8		241.5
Turn Bay Length (m)	60.0		50.0		50.0		70.0	
Base Capacity (vph)	181	430	270	446	318	3095	274	3318
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.22	0.16	0.31	0.21	0.50	0.51	0.63

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	47	47	42	45	93	68	1410	152	140	1991	95
Future Volume (vph)	39	47	47	42	45	93	68	1410	152	140	1991	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.93		1.00	0.90		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1666		1652	1619		1711	4356		1711	4391	
Flt Permitted	0.43	1.00		0.64	1.00		0.05	1.00		0.10	1.00	
Satd. Flow (perm)	748	1666		1115	1619		89	4356		173	4391	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	39	47	47	42	45	93	68	1410	152	140	1991	95
RTOR Reduction (vph)	0	31	0	0	64	0	0	6	0	0	2	0
Lane Group Flow (vph)	39	63	0	42	74	0	68	1556	0	140	2085	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.8	12.8		12.8	12.8		105.6	99.4		115.2	105.0	
Effective Green, g (s)	12.8	12.8		12.8	12.8		105.6	99.4		115.2	105.0	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.75	0.71		0.82	0.75	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	68	152		101	148		138	3092		271	3293	
v/s Ratio Prot		0.04			0.05		0.02	0.36		c0.04	c0.47	
v/s Ratio Perm	c0.05			0.04			0.35			0.38		
v/c Ratio	0.57	0.42		0.42	0.50		0.49	0.50		0.52	0.63	
Uniform Delay, d1	61.0	60.1		60.1	60.6		8.4	9.2		6.8	8.3	
Progression Factor	1.00	1.00		1.00	0.99		2.54	0.81		2.45	0.52	
Incremental Delay, d2	11.2	1.8		2.8	2.7		0.3	0.1		1.3	0.7	
Delay (s)	72.3	61.9		62.9	62.4		21.5	7.5		18.0	5.1	
Level of Service	E	E		E	E		C	A		B	A	
Approach Delay (s/veh)		64.9			62.5			8.1			5.9	
Approach LOS		E			E			A			A	

Intersection Summary

HCM 2000 Control Delay (s/veh)	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

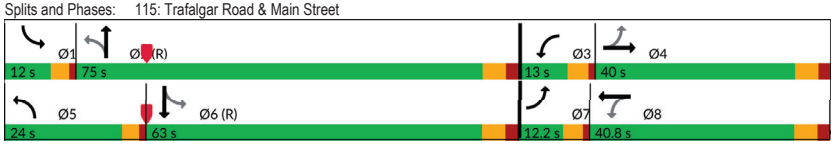
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	105	478	226	395	79	377	1498	105	76	1782	360
Future Volume (vph)	148	105	478	226	395	79	377	1498	105	76	1782	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.877			0.975			0.990			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3138	0	1789	3489	0	1711	4377	0	1711	4310	0
Flt Permitted	0.238			0.165			0.066			0.099		
Satd. Flow (perm)	448	3138	0	311	3489	0	119	4377	0	178	4310	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		224			16			9			29	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	148	105	478	226	395	79	377	1498	105	76	1782	360
Shared Lane Traffic (%)												
Lane Group Flow (vph)	148	583	0	226	474	0	377	1603	0	76	2142	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0		9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	12.2	40.0		13.0	40.8		24.0	75.0		12.0	63.0	
Total Split (%)	8.7%	28.6%		9.3%	29.1%		17.1%	53.6%		8.6%	45.0%	
Maximum Green (s)	7.7	34.0		8.5	34.8		20.0	69.0		8.0	57.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		27.0			27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	32.6	23.4		34.2	24.2		93.6	79.2		67.4	57.0	
Actuated g/C Ratio	0.23	0.17		0.24	0.17		0.67	0.57		0.48	0.41	
v/c Ratio	0.83	1.05dr		1.37	0.77		0.88	0.65		0.43	1.21	
Control Delay (s/veh)	77.9	44.0		234.2	61.7		65.3	27.5		21.9	138.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	77.9	44.0		234.2	61.7		65.3	27.5		21.9	138.6	
LOS	E	D		F	E		E	C		C	F	
Approach Delay (s/veh)		50.8			117.4			34.7			134.6	
Approach LOS		D			F			C			F	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.37
Intersection Signal Delay (s/veh): 86.4 Intersection LOS: F
Intersection Capacity Utilization 111.3% ICU Level of Service H
Analysis Period (min) 15
* User Entered Value
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	148	583	226	474	377	1603	76	2142
v/c Ratio	0.83	1.05dr	1.37	0.77	0.88	0.65	0.43	1.21
Control Delay (s/veh)	77.9	44.0	234.2	61.7	65.3	27.5	21.9	138.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	77.9	44.0	234.2	61.7	65.3	27.5	21.9	138.6
Queue Length 50th (m)	33.4	53.3	~66.9	65.8	93.2	90.7	8.5	~305.3
Queue Length 95th (m)	#56.2	70.6	#110.6	79.9	#171.8	169.8	15.6	#338.1
Internal Link Dist (m)		882.8		603.0		688.8		212.3
Turn Bay Length (m)	60.0		90.0		50.0		50.0	
Base Capacity (vph)	178	931	165	879	427	2479	183	1771
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.63	1.37	0.54	0.88	0.65	0.42	1.21

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	105	478	226	395	79	377	1498	105	76	1782	360
Future Volume (vph)	148	105	478	226	395	79	377	1498	105	76	1782	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.88		1.00	0.98		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3138		1789	3489		1711	4377		1711	4309	
Flt Permitted	0.24	1.00		0.17	1.00		0.07	1.00		0.10	1.00	
Satd. Flow (perm)	448	3138		311	3489		118	4377		179	4309	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	148	105	478	226	395	79	377	1498	105	76	1782	360
RTOR Reduction (vph)	0	187	0	0	13	0	0	4	0	0	17	0
Lane Group Flow (vph)	148	396	0	226	461	0	377	1599	0	76	2125	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.1	23.4		32.7	24.2		91.6	79.2		65.4	57.0	
Effective Green, g (s)	31.1	23.4		32.7	24.2		91.6	79.2		65.4	57.0	
Actuated g/C Ratio	0.22	0.17		0.23	0.17		0.65	0.57		0.47	0.41	
Clearance Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	173	524		162	603		425	2476		175	1754	
v/s Ratio Prot	0.05	0.13		c0.08	0.13		c0.19	0.37		0.03	c0.49	
v/s Ratio Perm	0.14			c0.24			0.39			0.18		
v/c Ratio	0.86	1.05dr		1.40	0.76		0.89	0.65		0.43	1.21	
Uniform Delay, d1	49.4	55.6		50.0	55.2		44.1	20.8		21.1	41.5	
Progression Factor	1.00	1.00		1.00	1.00		1.12	1.20		1.13	1.09	
Incremental Delay, d2	31.5	6.2		210.9	5.7		18.3	1.2		1.6	100.3	
Delay (s)	80.9	61.7		260.9	60.9		67.5	26.3		25.4	145.7	
Level of Service	F	E		F	E		E	C		C	F	
Approach Delay (s/veh)		65.6			125.5			34.1			141.6	
Approach LOS		E			F			C			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	91.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	111.3%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

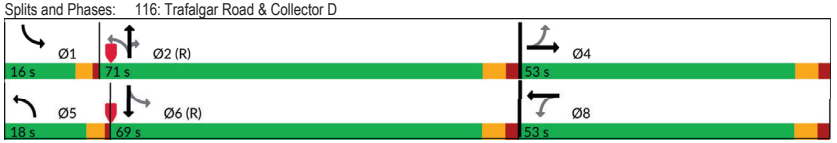
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	18	100	185	18	259	146	1351	47	121	1934	188
Future Volume (vph)	92	18	100	185	18	259	146	1351	47	121	1934	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.873			0.860				0.850		0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1572	0	1652	1549	0	1711	4421	1566	1711	4363	0
Flt Permitted	0.282			0.635			0.046			0.126		
Satd. Flow (perm)	490	1572	0	1104	1549	0	83	4421	1566	227	4363	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		100			192				55		13	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	92	18	100	185	18	259	146	1351	47	121	1934	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	118	0	185	277	0	146	1351	47	121	2122	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0	26.0	11.0	26.0	
Total Split (s)	53.0	53.0		53.0	53.0		18.0	71.0	71.0	16.0	69.0	
Total Split (%)	37.9%	37.9%		37.9%	37.9%		12.9%	50.7%	50.7%	11.4%	49.3%	
Maximum Green (s)	47.0	47.0		47.0	47.0		14.0	65.0	65.0	12.0	63.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	27.7	27.7		27.7	27.7		100.3	86.5	86.5	96.2	84.4	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.72	0.62	0.62	0.69	0.60	
v/c Ratio	0.96	0.30		0.85	0.60		0.74	0.49	0.05	0.47	0.81	
Control Delay (s/veh)	134.0	12.7		84.4	20.4		76.9	2.9	0.3	15.9	35.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	134.0	12.7		84.4	20.4		76.9	2.9	0.3	15.9	35.2	
LOS	F	B		F	C		E	A	A	B	D	
Approach Delay (s/veh)		65.9			46.1			9.8			34.2	
Approach LOS		E			D			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 28.5		Intersection LOS: C	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	92	118	185	277	146	1351	47	121	2122
v/c Ratio	0.96	0.30	0.85	0.60	0.74	0.49	0.05	0.47	0.81
Control Delay (s/veh)	134.0	12.7	84.4	20.4	76.9	2.9	0.3	15.9	35.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	134.0	12.7	84.4	20.4	76.9	2.9	0.3	15.9	35.2
Queue Length 50th (m)	25.8	4.2	50.6	20.6	27.6	15.5	0.0	16.5	191.9
Queue Length 95th (m)	#51.5	19.2	72.8	46.0	50.6	29.3	0.0	m17.3	m168.0
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	164	594	370	647	234	2730	988	292	2636
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.20	0.50	0.43	0.62	0.49	0.05	0.41	0.81

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	18	100	185	18	259	146	1351	47	121	1934	188
Future Volume (vph)	92	18	100	185	18	259	146	1351	47	121	1934	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1572		1652	1548		1711	4421	1566	1711	4362	
Flt Permitted	0.28	1.00		0.63	1.00		0.05	1.00	1.00	0.13	1.00	
Satd. Flow (perm)	491	1572		1104	1548		83	4421	1566	226	4362	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	92	18	100	185	18	259	146	1351	47	121	1934	188
RTOR Reduction (vph)	0	80	0	0	154	0	0	0	18	0	5	0
Lane Group Flow (vph)	92	38	0	185	123	0	146	1351	29	121	2117	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	27.7	27.7		27.7	27.7		98.3	86.5	86.5	94.3	84.5	
Effective Green, g (s)	27.7	27.7		27.7	27.7		98.3	86.5	86.5	94.3	84.5	
Actuated g/C Ratio	0.20	0.20		0.20	0.20		0.70	0.62	0.62	0.67	0.60	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	97	311		218	306		195	2731	967	256	2632	
v/s Ratio Prot		0.02			0.08		c0.06	0.31		0.03	c0.49	
v/s Ratio Perm	c0.19			0.17			0.46		0.02	0.28		
v/c Ratio	0.95	0.12		0.85	0.40		0.75	0.49	0.03	0.47	0.80	
Uniform Delay, d1	55.4	46.1		54.1	48.9		39.6	14.7	10.4	9.7	21.4	
Progression Factor	1.00	1.00		1.00	1.00		1.78	0.14	0.07	2.09	1.52	
Incremental Delay, d2	73.8	0.2		25.2	0.9		13.4	0.6	0.1	0.1	0.3	
Delay (s)	129.3	46.3		79.3	49.8		83.7	2.7	0.8	20.4	32.8	
Level of Service	F	D		E	D		F	A	A	C	C	
Approach Delay (s/veh)		82.7			61.6			10.3			32.1	
Approach LOS		F			E			B			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

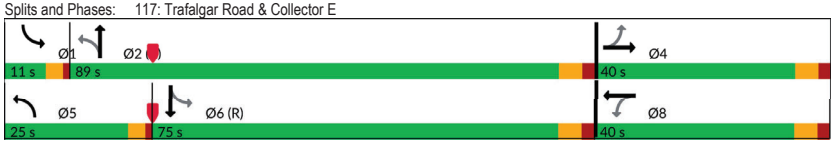
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	8	4	81	7	63	33	1472	37	61	2129	29
Future Volume (vph)	9	8	4	81	7	63	33	1472	37	61	2129	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.950			0.865			0.996			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1789	0	1789	1629	0	1711	4403	0	1711	4412	0
Flt Permitted	0.711			0.750			0.043			0.111		
Satd. Flow (perm)	1339	1789	0	1413	1629	0	77	4403	0	200	4412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			63			4			2	
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	8	4	81	7	63	33	1472	37	61	2129	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	12	0	81	70	0	33	1509	0	61	2158	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	13.9	13.9		13.9	13.9		112.5	105.2		114.1	107.8	
Actuated g/C Ratio	0.10	0.10		0.10	0.10		0.80	0.75		0.82	0.77	
v/c Ratio	0.07	0.07		0.58	0.32		0.24	0.46		0.26	0.64	
Control Delay (s/veh)	56.4	43.4		75.8	18.7		20.0	1.5		4.7	6.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	56.4	43.4		75.8	18.7		20.0	1.5		4.7	6.8	
LOS	E	D		E	B		C	A		A	A	
Approach Delay (s/veh)		49.0			49.3			1.9			6.7	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 6.7		Intersection LOS: A	
Intersection Capacity Utilization 71.7%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	9	12	81	70	33	1509	61	2158
v/c Ratio	0.07	0.07	0.58	0.32	0.24	0.46	0.26	0.64
Control Delay (s/veh)	56.4	43.4	75.8	18.7	20.0	1.5	4.7	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.4	43.4	75.8	18.7	20.0	1.5	4.7	6.8
Queue Length 50th (m)	2.2	2.1	22.3	1.8	0.4	12.8	3.3	81.7
Queue Length 95th (m)	m5.7	m7.0	38.0	16.0	m7.9	16.5	m3.0	60.6
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	325	437	343	443	309	3310	239	3397
Starvation Cap Reductn	0	0	0	0	0	0	0	138
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.03	0.24	0.16	0.11	0.46	0.26	0.66

Intersection Summary

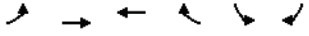
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	8	4	81	7	63	33	1472	37	61	2129	29
Future Volume (vph)	9	8	4	81	7	63	33	1472	37	61	2129	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.95		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1789		1789	1629		1711	4405		1711	4412	
Flt Permitted	0.71	1.00		0.75	1.00		0.04	1.00		0.11	1.00	
Satd. Flow (perm)	1340	1789		1412	1629		78	4405		199	4412	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	8	4	81	7	63	33	1472	37	61	2129	29
RTOR Reduction (vph)	0	4	0	0	57	0	0	1	0	0	0	0
Lane Group Flow (vph)	9	8	0	81	13	0	33	1508	0	61	2158	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.9	13.9		13.9	13.9		108.3	104.4		111.9	106.2	
Effective Green, g (s)	13.9	13.9		13.9	13.9		108.3	104.4		111.9	106.2	
Actuated g/C Ratio	0.10	0.10		0.10	0.10		0.77	0.75		0.80	0.76	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	133	177		140	161		105	3284		220	3346	
v/s Ratio Prot		0.00			0.01		0.01	0.34		c0.01	c0.49	
v/s Ratio Perm	0.01			c0.06			0.23			0.21		
v/c Ratio	0.07	0.05		0.58	0.08		0.31	0.46		0.28	0.64	
Uniform Delay, d1	57.2	57.1		60.3	57.3		7.2	6.9		4.0	8.0	
Progression Factor	1.01	0.99		1.00	0.97		5.43	0.16		1.19	0.72	
Incremental Delay, d2	0.2	0.1		5.7	0.2		1.5	0.4		0.4	0.6	
Delay (s)	58.1	56.8		65.7	55.9		40.6	1.5		5.2	6.4	
Level of Service	E	E		E	E		D	A		A	A	
Approach Delay (s/veh)		57.4			61.1			2.3			6.4	
Approach LOS		E			E			A			A	

Intersection Summary

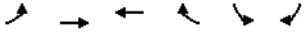
HCM 2000 Control Delay (s/veh)	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	485	1035	97	246	18
Future Volume (vph)	7	485	1035	97	246	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.987		0.991	
Flt Protected		0.999			0.955	
Satd. Flow (prot)	0	3418	3377	0	1704	0
Flt Permitted		0.999			0.955	
Satd. Flow (perm)	0	3418	3377	0	1704	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	7	485	1035	97	246	18
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	492	1132	0	264	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	485	1035	97	246	18
Future Volume (Veh/h)	7	485	1035	97	246	18
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	7	485	1035	97	246	18
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1132				1340	566
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1132				1340	566
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				0	96
cM capacity (veh/h)	613				142	467

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	169	323	690	442	264
Volume Left	7	0	0	0	246
Volume Right	0	0	0	97	18
cSH	613	1700	1700	1700	149
Volume to Capacity	0.01	0.19	0.41	0.26	1.77
Queue Length 95th (m)	0.3	0.0	0.0	0.0	147.7
Control Delay (s/veh)	0.6	0.0	0.0	0.0	423.5
Lane LOS	A				F
Approach Delay (s/veh)	0.2		0.0		423.5
Approach LOS					F

Intersection Summary			
Average Delay		59.3	
Intersection Capacity Utilization		53.1%	ICU Level of Service A
Analysis Period (min)		15	

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	71	215	485	0	0	215
Future Volume (vph)	71	215	485	0	0	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.988				
Satd. Flow (prot)	0	3536	3579	0	1629	0
Flt Permitted		0.988				
Satd. Flow (perm)	0	3536	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	71	215	485	0	0	215
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	286	485	0	215	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	71	215	485	0	0	215
Future Volume (Veh/h)	71	215	485	0	0	215
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	71	215	485	0	0	215
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	485				735	243
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	485				735	243
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	93				100	72
cM capacity (veh/h)	1074				332	758

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	143	143	323	162	215
Volume Left	71	0	0	0	0
Volume Right	0	0	0	0	215
cSH	1074	1700	1700	1700	758
Volume to Capacity	0.07	0.08	0.19	0.10	0.28
Queue Length 95th (m)	1.6	0.0	0.0	0.0	8.9
Control Delay (s/veh)	4.6	0.0	0.0	0.0	11.6
Lane LOS	A				B
Approach Delay (s/veh)	2.3		0.0		11.6
Approach LOS					B

Intersection Summary				
Average Delay	3.2			
Intersection Capacity Utilization	44.7%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	215	0	0	0	0	485
Future Volume (vph)	215	0	0	0	0	485
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			80.2	161.7	
Travel Time (s)	55.9			6.0	12.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	215	0	0	0	0	485
Shared Lane Traffic (%)						
Lane Group Flow (vph)	215	0	0	0	0	485
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	215	0	0	0	0	485
Future Volume (vph)	215	0	0	0	0	485
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	215	0	0	0	0	485

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	215	0	485
Volume Left (vph)	215	0	0
Volume Right (vph)	0	0	485
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	6.1	5.6	4.0
Degree Utilization, x	0.36	0.00	0.54
Capacity (veh/h)	557	618	866
Control Delay (s/veh)	11.3	7.4	11.7
Approach Delay (s/veh)	11.3		11.7
Approach LOS	B		B

Intersection Summary			
Delay	11.6		
Level of Service	B		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	36	12	0	0	0
Future Volume (vph)	0	36	12	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	70	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	8.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	36	12	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	36	0	0	12	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	36	12	0	0	0
Future Volume (Veh/h)	0	36	12	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	36	12	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	24	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	24	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	99			
cM capacity (veh/h)	985	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	36	12	0
Volume Left	0	12	0
Volume Right	36	0	0
cSH	1085	1623	1700
Volume to Capacity	0.03	0.00*	0.00
Queue Length 95th (m)	0.8	0.2	0.0
Control Delay (s/veh)	8.4	7.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	7.2	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		8.1		
Intersection Capacity Utilization		13.3%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

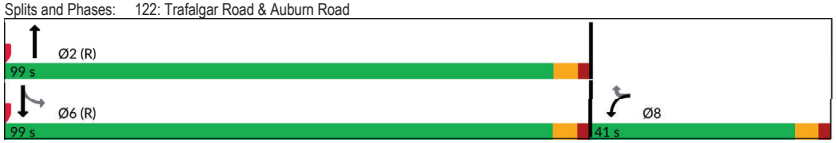
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	68	125	1600	39	57	1779
Future Volume (vph)	68	125	1600	39	57	1779
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.996			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4403	0	1711	4421
Flt Permitted	0.950				0.101	
Satd. Flow (perm)	1789	1601	4403	0	182	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		43	5			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	68	125	1600	39	57	1779
Shared Lane Traffic (%)						
Lane Group Flow (vph)	68	125	1639	0	57	1779
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		20.0	20.0
Minimum Split (s)	40.0	40.0	40.0		40.0	40.0
Total Split (s)	41.0	41.0	99.0		99.0	99.0
Total Split (%)	29.3%	29.3%	70.7%		70.7%	70.7%
Maximum Green (s)	35.0	35.0	93.0		93.0	93.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Don't Walk (s)	9.0	9.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	13.5	13.5	114.5		114.5	114.5
Actuated g/C Ratio	0.10	0.10	0.82		0.82	0.82
v/c Ratio	0.40	0.65	0.46		0.39	0.49
Control Delay (s/veh)	65.1	54.8	6.8		12.7	4.7
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	65.1	54.8	6.8		12.7	4.7
LOS	E	D	A		B	A
Approach Delay (s/veh)	58.5		6.8			4.9
Approach LOS	E		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 8.6		Intersection LOS: A	
Intersection Capacity Utilization 65.7%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	68	125	1639	57	1779
v/c Ratio	0.40	0.65	0.46	0.39	0.49
Control Delay (s/veh)	65.1	54.8	6.8	12.7	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	65.1	54.8	6.8	12.7	4.7
Queue Length 50th (m)	18.4	22.6	93.2	3.3	49.8
Queue Length 95th (m)	32.5	42.3	17.5	14.4	76.5
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	447	432	3602	148	3616
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.15	0.29	0.46	0.39	0.49

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	68	125	1600	39	57	1779
Future Volume (vph)	68	125	1600	39	57	1779
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4405		1711	4421
Flt Permitted	0.95	1.00	1.00		0.10	1.00
Satd. Flow (perm)	1789	1601	4405		181	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	68	125	1600	39	57	1779
RTOR Reduction (vph)	0	39	1	0	0	0
Lane Group Flow (vph)	68	86	1638	0	57	1779
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases		8			6	
Actuated Green, G (s)	13.5	13.5	114.5		114.5	114.5
Effective Green, g (s)	13.5	13.5	114.5		114.5	114.5
Actuated g/C Ratio	0.10	0.10	0.82		0.82	0.82
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	172	154	3602		148	3615
v/s Ratio Prot	0.04		0.37			c0.40
v/s Ratio Perm		c0.05			0.31	
v/c Ratio	0.40	0.56	0.45		0.39	0.49
Uniform Delay, d1	59.4	60.4	3.7		3.4	3.9
Progression Factor	1.00	1.00	1.62		1.00	1.00
Incremental Delay, d2	1.5	4.4	0.3		7.4	0.5
Delay (s)	60.9	64.8	6.3		10.8	4.4
Level of Service	E	E	A		B	A
Approach Delay (s/veh)	63.4		6.3			4.6
Approach LOS	E		A			A

Intersection Summary				
HCM 2000 Control Delay (s/veh)	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	36	12	12	36	0
Future Volume (vph)	0	36	12	12	36	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.976		
Satd. Flow (prot)	1629	0	0	1838	1883	0
Flt Permitted				0.976		
Satd. Flow (perm)	1629	0	0	1838	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	36	12	12	36	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	36	0	0	24	36	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	36	12	12	36	0
Future Volume (Veh/h)	0	36	12	12	36	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	36	12	12	36	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	72	36	36			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	72	36	36			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	99			
cM capacity (veh/h)	925	1037	1575			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	36	24	36
Volume Left	0	12	0
Volume Right	36	0	0
cSH	1037	1575	1700
Volume to Capacity	0.03	0.00*	0.02
Queue Length 95th (m)	0.8	0.2	0.0
Control Delay (s/veh)	8.6	3.7	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.6	3.7	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		4.1		
Intersection Capacity Utilization		18.0%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	86	27	47	23	34
Future Volume (vph)	16	86	27	47	23	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.886		0.914			
Flt Protected	0.992					0.980
Satd. Flow (prot)	1583	0	1646	0	0	1765
Flt Permitted	0.992					0.980
Satd. Flow (perm)	1583	0	1646	0	0	1765
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	16	86	27	47	23	34
Shared Lane Traffic (%)						
Lane Group Flow (vph)	102	0	74	0	0	57
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	86	27	47	23	34
Future Volume (Veh/h)	16	86	27	47	23	34
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	16	86	27	47	23	34
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	131	51			74	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	131	51			74	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	92			98	
cM capacity (veh/h)	851	1018			1526	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	102	74	57
Volume Left	16	0	23
Volume Right	86	47	0
cSH	987	1700	1526
Volume to Capacity	0.10	0.04	0.02
Queue Length 95th (m)	2.6	0.0	0.3
Control Delay (s/veh)	9.1	0.0	3.1
Lane LOS	A		A
Approach Delay (s/veh)	9.1	0.0	3.1
Approach LOS	A		

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	22.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	84	12	83	194	4	23	26	63	43	5	0
Future Volume (vph)	0	84	12	83	194	4	23	26	63	43	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.983			0.998			0.924				
Flt Protected					0.985			0.990			0.957	
Satd. Flow (prot)	0	1851	0	0	1770	0	0	1723	0	0	1802	0
Flt Permitted					0.985			0.990			0.957	
Satd. Flow (perm)	0	1851	0	0	1770	0	0	1723	0	0	1802	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	84	12	83	194	4	23	26	63	43	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	96	0	0	281	0	0	112	0	0	48	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	84	12	83	194	4	23	26	63	43	5	0
Future Volume (Veh/h)	0	84	12	83	194	4	23	26	63	43	5	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	84	12	83	194	4	23	26	63	43	5	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	198			96			455	454	90	528	458	196
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	198			96			455	454	90	528	458	196
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			94			95	95	93	89	99	100
cM capacity (veh/h)	1375			1498			490	474	968	396	472	845

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	96	281	112	48
Volume Left	0	83	23	43
Volume Right	12	4	63	0
cSH	1375	1498	671	402
Volume to Capacity	0.00	0.06	0.17	0.12
Queue Length 95th (m)	0.0	1.3	4.5	3.1
Control Delay (s/veh)	0.0	2.6	11.4	15.2
Lane LOS		A	B	C
Approach Delay (s/veh)	0.0	2.6	11.4	15.2
Approach LOS			B	C

Intersection Summary				
Average Delay		5.1		
Intersection Capacity Utilization		37.3%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	86	72	28	291	69	38
Future Volume (vph)	86	72	28	291	69	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.938				0.952	
Flt Protected				0.996	0.969	
Satd. Flow (prot)	1767	0	0	1876	1737	0
Flt Permitted				0.996	0.969	
Satd. Flow (perm)	1767	0	0	1876	1737	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	86	72	28	291	69	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	158	0	0	319	107	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		97	97		97	97
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	7	67	10	4	46
Future Volume (vph)	4	7	67	10	4	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.914		0.982			
Flt Protected	0.982					0.996
Satd. Flow (prot)	1560	0	1768	0	0	1793
Flt Permitted	0.982					0.996
Satd. Flow (perm)	1560	0	1768	0	0	1793
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	7	67	10	4	46
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	0	77	0	0	50
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	7	67	10	4	46
Future Volume (Veh/h)	4	7	67	10	4	46
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	7	67	10	4	46
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	126	72			77	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	126	72			77	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	866	990			1522	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	11	77	50
Volume Left	4	0	4
Volume Right	7	10	0
cSH	941	1700	1522
Volume to Capacity	0.01	0.05	0.00*
Queue Length 95th (m)	0.3	0.0	0.1
Control Delay (s/veh)	8.9	0.0	0.6
Lane LOS	A		A
Approach Delay (s/veh)	8.9	0.0	0.6
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	15.7%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	12	9	9	41	16	11	94	9	12	86	2
Future Volume (vph)	2	12	9	9	41	16	11	94	9	12	86	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.947			0.967			0.989			0.997	
Flt Protected		0.996			0.993			0.995			0.994	
Satd. Flow (prot)	0	1640	0	0	1669	0	0	1772	0	0	1784	0
Flt Permitted		0.996			0.993			0.995			0.994	
Satd. Flow (perm)	0	1640	0	0	1669	0	0	1772	0	0	1784	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	2	12	9	9	41	16	11	94	9	12	86	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	0	0	66	0	0	114	0	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.9%	ICU Level of Service A	
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	12	9	9	41	16	11	94	9	12	86	2
Future Volume (Veh/h)	2	12	9	9	41	16	11	94	9	12	86	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	12	9	9	41	16	11	94	9	12	86	2
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	268	236	87	247	233	99	88			103		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	268	236	87	247	233	99	88			103		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	99	94	98	99			99		
cM capacity (veh/h)	634	655	971	683	657	957	1508			1489		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	23	66	114	100
Volume Left	2	9	11	12
Volume Right	9	16	9	2
cSH	748	715	1508	1489
Volume to Capacity	0.03	0.09	0.00*	0.00*
Queue Length 95th (m)	0.7	2.3	0.2	0.2
Control Delay (s/veh)	10.0	10.5	0.8	0.9
Lane LOS	A	B	A	A
Approach Delay (s/veh)	10.0	10.5	0.8	0.9
Approach LOS	A	B		

Intersection Summary				
Average Delay	3.7			
Intersection Capacity Utilization	19.9%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	28	16	0	49	0	67	134	8	0	133	22
Future Volume (vph)	9	28	16	0	49	0	67	134	8	0	133	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.959						0.995			0.981	
Flt Protected		0.992						0.984				
Satd. Flow (prot)	0	1792	0	0	1883	0	0	1763	0	0	1766	0
Flt Permitted		0.992						0.984				
Satd. Flow (perm)	0	1792	0	0	1883	0	0	1763	0	0	1766	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	28	16	0	49	0	67	134	8	0	133	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	0	0	49	0	0	209	0	0	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	97		97	24		97	97		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	28	16	0	49	0	67	134	8	0	133	22
Future Volume (Veh/h)	9	28	16	0	49	0	67	134	8	0	133	22
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	9	28	16	0	49	0	67	134	8	0	133	22
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	441	420	144	446	427	138	155			142		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	441	420	144	446	427	138	155			142		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	94	98	100	90	100	95			100		
cM capacity (veh/h)	470	500	903	474	495	910	1425			1441		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	53	49	209	155
Volume Left	9	0	67	0
Volume Right	16	0	8	22
cSH	571	495	1425	1441
Volume to Capacity	0.09	0.10	0.05	0.00
Queue Length 95th (m)	2.3	2.5	1.1	0.0
Control Delay (s/veh)	12.0	13.1	2.7	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	12.0	13.1	2.7	0.0
Approach LOS	B	B		

Intersection Summary					
Average Delay		4.0			
Intersection Capacity Utilization		39.2%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	34	2	1	39	11	5	46	15	8	25	17
Future Volume (vph)	20	34	2	1	39	11	5	46	15	8	25	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.971			0.969			0.954	
Flt Protected		0.982			0.999			0.996			0.992	
Satd. Flow (prot)	0	1699	0	0	1747	0	0	1738	0	0	1704	0
Flt Permitted		0.982			0.999			0.996			0.992	
Satd. Flow (perm)	0	1699	0	0	1747	0	0	1738	0	0	1704	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	34	2	1	39	11	5	46	15	8	25	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	51	0	0	66	0	0	50	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	34	2	1	39	11	5	46	15	8	25	17
Future Volume (Veh/h)	20	34	2	1	39	11	5	46	15	8	25	17
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	34	2	1	39	11	5	46	15	8	25	17
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	144	121	34	132	122	54	42			61		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	144	121	34	132	122	54	42			61		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	96	100	100	95	99	100			99		
cM capacity (veh/h)	780	763	1040	805	762	1014	1567			1542		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	56	51	66	50
Volume Left	20	1	5	8
Volume Right	2	11	15	17
cSH	777	806	1567	1542
Volume to Capacity	0.07	0.06	0.00*	0.00*
Queue Length 95th (m)	1.8	1.5	0.1	0.1
Control Delay (s/veh)	10.0	9.8	0.6	1.2
Lane LOS	A	A	A	A
Approach Delay (s/veh)	10.0	9.8	0.6	1.2
Approach LOS	A	A		

Intersection Summary					
Average Delay		5.2			
Intersection Capacity Utilization		21.1%	ICU Level of Service		A
Analysis Period (min)		15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	63	0	8	76	90	6	19	5	80	19	5
Future Volume (vph)	5	63	0	8	76	90	6	19	5	80	19	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.930			0.977			0.994	
Flt Protected		0.996			0.998			0.990			0.963	
Satd. Flow (prot)	0	1793	0	0	1671	0	0	1742	0	0	1724	0
Flt Permitted		0.996			0.998			0.990			0.963	
Satd. Flow (perm)	0	1793	0	0	1671	0	0	1742	0	0	1724	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	63	0	8	76	90	6	19	5	80	19	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	0	0	174	0	0	30	0	0	104	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

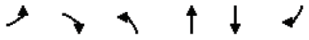
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	63	0	8	76	90	6	19	5	80	19	5
Future Volume (Veh/h)	5	63	0	8	76	90	6	19	5	80	19	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	63	0	8	76	90	6	19	5	80	19	5
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	166			63			225	255	63	225	210	121
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	166			63			225	255	63	225	210	121
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	97	100	89	97	99
cM capacity (veh/h)	1412			1540			707	643	1002	706	681	930

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	68	174	30	104
Volume Left	5	8	6	80
Volume Right	0	90	5	5
cSH	1412	1540	697	710
Volume to Capacity	0.00*	0.00*	0.04	0.15
Queue Length 95th (m)	0.1	0.1	1.0	3.9
Control Delay (s/veh)	0.6	0.4	10.4	10.9
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.6	0.4	10.4	10.9
Approach LOS			B	B

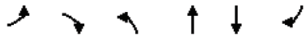
Intersection Summary				
Average Delay		4.1		
Intersection Capacity Utilization		30.8%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	152	52	60	61	67	98
Future Volume (vph)	152	52	60	61	67	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.966				0.920	
Flt Protected	0.964			0.976		
Satd. Flow (prot)	1677	0	0	1757	1657	0
Flt Permitted	0.964			0.976		
Satd. Flow (perm)	1677	0	0	1757	1657	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	152	52	60	61	67	98
Shared Lane Traffic (%)						
Lane Group Flow (vph)	204	0	0	121	165	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	152	52	60	61	67	98
Future Volume (Veh/h)	152	52	60	61	67	98
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	152	52	60	61	67	98
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	297	116	165			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	297	116	165			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	77	94	96			
cM capacity (veh/h)	665	936	1413			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	204	121	165
Volume Left	152	60	0
Volume Right	52	0	98
cSH	718	1413	1700
Volume to Capacity	0.28	0.04	0.10
Queue Length 95th (m)	8.9	1.0	0.0
Control Delay (s/veh)	12.0	4.0	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	12.0	4.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	20	14	6	15	0
Future Volume (vph)	0	20	14	6	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.966		
Satd. Flow (prot)	1629	0	0	1819	1883	0
Flt Permitted				0.966		
Satd. Flow (perm)	1629	0	0	1819	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	278.5	
Travel Time (s)	16.7			24.3	14.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	20	14	6	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	20	15	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	20	14	6	15	0
Future Volume (Veh/h)	0	20	14	6	15	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	20	14	6	15	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	49	15	15			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	49	15	15			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	952	1065	1603			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	20	20	15
Volume Left	0	14	0
Volume Right	20	0	0
cSH	1065	1603	1700
Volume to Capacity	0.02	0.00*	0.00*
Queue Length 95th (m)	0.4	0.2	0.0
Control Delay (s/veh)	8.4	5.1	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	5.1	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		4.9		
Intersection Capacity Utilization		17.8%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	33	48	0	34	19	11
Future Volume (vph)	33	48	0	34	19	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.920				0.950	
Flt Protected					0.969	
Satd. Flow (prot)	1657	0	0	1801	1658	0
Flt Permitted					0.969	
Satd. Flow (perm)	1657	0	0	1801	1658	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	33	48	0	34	19	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	81	0	0	34	30	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	33	48	0	34	19	11
Future Volume (Veh/h)	33	48	0	34	19	11
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	33	48	0	34	19	11
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	49	0	108	44	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	49	0	108	44	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	96	96	100	96	99	
cM capacity (veh/h)	833	1085	800	838	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	81	34	30
Volume Left	0	0	19
Volume Right	48	0	11
cSH	966	838	1623
Volume to Capacity	0.08	0.04	0.01
Queue Length 95th (m)	2.1	1.0	0.3
Control Delay (s/veh)	9.1	9.5	4.6
Lane LOS	A	A	A
Approach Delay (s/veh)	9.1	9.5	4.6
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.2		
Intersection Capacity Utilization	14.7%	ICU Level of Service	A
Analysis Period (min)	15		

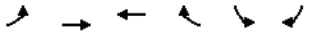
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	28	37	76	29	3
Future Volume (vph)	2	28	37	76	29	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.874				0.987	
Flt Protected	0.997			0.984		
Satd. Flow (prot)	1515	0	0	1772	1777	0
Flt Permitted	0.997			0.984		
Satd. Flow (perm)	1515	0	0	1772	1777	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	2	28	37	76	29	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	0	113	32	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	28	37	76	29	3
Future Volume (Veh/h)	2	28	37	76	29	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	28	37	76	29	3
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	181	31	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	181	31	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	98			
cM capacity (veh/h)	790	1044	1580			

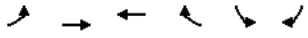
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	30	113	32
Volume Left	2	37	0
Volume Right	28	0	3
cSH	1022	1580	1700
Volume to Capacity	0.03	0.02	0.02
Queue Length 95th (m)	0.7	0.5	0.0
Control Delay (s/veh)	8.6	2.5	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.6	2.5	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		3.1		
Intersection Capacity Utilization		22.7%	ICU Level of Service	A
Analysis Period (min)		15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	31	130	255	97	80	80
Future Volume (vph)	31	130	255	97	80	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.963		0.932	
Flt Protected		0.990			0.976	
Satd. Flow (prot)	0	1783	1734	0	1581	0
Flt Permitted		0.990			0.976	
Satd. Flow (perm)	0	1783	1734	0	1581	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	31	130	255	97	80	80
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	161	352	0	160	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	31	130	255	97	80	80
Future Volume (Veh/h)	31	130	255	97	80	80
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	31	130	255	97	80	80
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.97				0.97	0.97
vC, conflicting volume	352				496	304
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	320				468	271
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				85	89
cM capacity (veh/h)	1206				525	748

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	161	352	160
Volume Left	31	0	80
Volume Right	0	97	80
cSH	1206	1700	617
Volume to Capacity	0.03	0.21	0.26
Queue Length 95th (m)	0.6	0.0	7.8
Control Delay (s/veh)	1.7	0.0	12.9
Lane LOS	A		B
Approach Delay (s/veh)	1.7	0.0	12.9
Approach LOS			B

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	32	43	14	118	9	15
Future Volume (vph)	32	43	14	118	9	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.923				0.916	
Flt Protected				0.995	0.982	
Satd. Flow (prot)	1605	0	0	1730	1620	0
Flt Permitted				0.995	0.982	
Satd. Flow (perm)	1605	0	0	1730	1620	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	32	43	14	118	9	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	75	0	0	132	24	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	32	43	14	118	9	15
Future Volume (Veh/h)	32	43	14	118	9	15
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	32	43	14	118	9	15
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	33	0	85	26	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	33	0	85	26	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	96	96	98	86	99	
cM capacity (veh/h)	855	1085	838	863	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	75	132	24
Volume Left	0	14	9
Volume Right	43	0	15
cSH	973	860	1623
Volume to Capacity	0.08	0.15	0.00*
Queue Length 95th (m)	1.9	4.1	0.1
Control Delay (s/veh)	9.0	9.9	2.7
Lane LOS	A	A	A
Approach Delay (s/veh)	9.0	9.9	2.7
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.9		
Intersection Capacity Utilization	23.7%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	67	224	121	32	5	133	8	134	3	8	15
Future Volume (vph)	48	67	224	121	32	5	133	8	134	3	8	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.911			0.996			0.934			0.922	
Flt Protected		0.993			0.963			0.976			0.994	
Satd. Flow (prot)	0	1629	0	0	1727	0	0	1641	0	0	1650	0
Flt Permitted		0.993			0.963			0.976			0.994	
Satd. Flow (perm)	0	1629	0	0	1727	0	0	1641	0	0	1650	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	48	67	224	121	32	5	133	8	134	3	8	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	339	0	0	158	0	0	275	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	67	224	121	32	5	133	8	134	3	8	15
Future Volume (Veh/h)	48	67	224	121	32	5	133	8	134	3	8	15
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	48	67	224	121	32	5	133	8	134	3	8	15
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked												
vC, conflicting volume	37			291			571	554	179	690	664	35
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	37			291			571	554	179	690	664	35
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			90			65	98	84	99	98	99
cM capacity (veh/h)	1574			1271			379	386	864	271	335	1039

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	339	158	275	26
Volume Left	48	121	133	3
Volume Right	224	5	134	15
cSH	1574	1271	522	526
Volume to Capacity	0.03	0.10	0.53	0.05
Queue Length 95th (m)	0.7	2.4	23.1	1.2
Control Delay (s/veh)	1.3	6.4	19.3	12.2
Lane LOS	A	A	C	B
Approach Delay (s/veh)	1.3	6.4	19.3	12.2
Approach LOS			C	B

Intersection Summary				
Average Delay		8.9		
Intersection Capacity Utilization		61.3%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	10	66	28	0
Future Volume (vph)	0	0	10	66	28	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected				0.993		
Satd. Flow (prot)	1739	0	0	1788	1801	0
Flt Permitted				0.993		
Satd. Flow (perm)	1739	0	0	1788	1801	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	10	66	28	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	76	28	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	10	66	28	0
Future Volume (Veh/h)	0	0	10	66	28	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	10	66	28	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	114	28	28			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	114	28	28			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	877	1047	1585			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	0	76	28
Volume Left	0	10	0
Volume Right	0	0	0
cSH	1700	1585	1700
Volume to Capacity	0.00	0.00*	0.02
Queue Length 95th (m)	0.0	0.1	0.0
Control Delay (s/veh)	0.0	1.0	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	0.0	1.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	14.0%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	65	64	0	0	21	28	22	0	86	0
Future Volume (vph)	0	0	65	64	0	0	21	28	22	0	86	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.958				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1777	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1777	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	65	64	0	0	21	28	22	0	86	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	0	0	64	0	0	71	0	0	86	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	65	64	0	0	21	28	22	0	86	0
Future Volume (Veh/h)	0	0	65	64	0	0	21	28	22	0	86	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	65	64	0	0	21	28	22	0	86	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			65			204	161	33	197	193	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			65			204	161	33	197	193	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			97	96	98	100	87	100
cM capacity (veh/h)	1623			1537			659	701	1041	701	673	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	65	64	71	86
Volume Left	0	64	21	0
Volume Right	65	0	22	0
cSH	1623	1537	764	673
Volume to Capacity	0.00	0.04	0.09	0.13
Queue Length 95th (m)	0.0	1.0	2.3	3.3
Control Delay (s/veh)	0.0	7.4	10.2	11.1
Lane LOS		A	B	B
Approach Delay (s/veh)	0.0	7.4	10.2	11.1
Approach LOS			B	B

Intersection Summary				
Average Delay	7.5			
Intersection Capacity Utilization	27.5%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	22	7	20	35	0
Future Volume (vph)	0	22	7	20	35	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.987		
Satd. Flow (prot)	1629	0	0	1859	1883	0
Flt Permitted				0.987		
Satd. Flow (perm)	1629	0	0	1859	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			32.9	35.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	22	7	20	35	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	0	27	35	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	22	7	20	35	0
Future Volume (Veh/h)	0	22	7	20	35	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	22	7	20	35	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	69	35	35			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	69	35	35			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	932	1038	1576			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	22	27	35
Volume Left	0	7	0
Volume Right	22	0	0
cSH	1038	1576	1700
Volume to Capacity	0.02	0.00*	0.02
Queue Length 95th (m)	0.5	0.1	0.0
Control Delay (s/veh)	8.5	1.9	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	1.9	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		2.9		
Intersection Capacity Utilization		17.2%	ICU Level of Service	A
Analysis Period (min)		15		

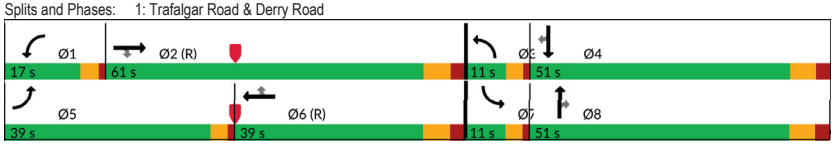
* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	981	1744	381	387	594	223	152	1668	362	127	1374	109
Future Volume (vph)	981	1744	381	387	594	223	152	1668	362	127	1374	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			122			123			204			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	1001	1780	389	395	606	228	155	1702	369	130	1402	111
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1001	1780	389	395	606	228	155	1702	369	130	1402	111
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	39.0	61.0	61.0	17.0	39.0	39.0	11.0	51.0	51.0	11.0	51.0	51.0
Total Split (%)	27.9%	43.6%	43.6%	12.1%	27.9%	27.9%	7.9%	36.4%	36.4%	7.9%	36.4%	36.4%
Maximum Green (s)	35.0	54.1	54.1	13.0	32.1	32.1	7.0	44.2	44.2	7.0	44.2	44.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	36.0	56.1	56.1	14.0	34.1	34.1	8.0	46.2	46.2	8.0	46.2	46.2
Actuated g/C Ratio	0.26	0.40	0.40	0.10	0.24	0.24	0.06	0.33	0.33	0.06	0.33	0.33
v/c Ratio	1.12	0.98	0.55	1.14	0.58	0.47	0.89	1.24	0.57	0.78	1.01	0.22
Control Delay (s/veh)	118.3	50.3	29.6	145.5	49.0	25.4	106.0	147.0	19.8	78.2	71.3	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	118.3	50.3	29.6	145.5	49.0	25.4	106.0	147.0	19.8	78.2	71.3	10.3
LOS	F	D	C	F	D	C	F	F	B	E	E	B
Approach Delay (s/veh)		69.2			75.6			123.1			67.7	
Approach LOS		E			E			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay (s/veh): 84.4		Intersection LOS: F	
Intersection Capacity Utilization 97.5%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1001	1780	389	395	606	228	155	1702	369	130	1402	111
v/c Ratio	1.12	0.98	0.55	1.14	0.58	0.47	0.89	1.24	0.57	0.78	1.01	0.22
Control Delay (s/veh)	118.3	50.3	29.6	145.5	49.0	25.4	106.0	147.0	19.8	78.2	71.3	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	118.3	50.3	29.6	145.5	49.0	25.4	106.0	147.0	19.8	78.2	71.3	10.3
Queue Length 50th (m)	~172.0	187.8	58.7	~63.8	60.1	24.0	24.9	~253.5	30.6	19.7	~181.5	8.0
Queue Length 95th (m)	m#157.0	m168.4	m54.4	#101.5	74.7	44.3	m#29.8	m#272.6	m48.5	#37.7	#218.6	30.6
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	892	1811	708	347	1049	490	174	1377	653	166	1390	501
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.98	0.55	1.14	0.58	0.47	0.89	1.24	0.57	0.78	1.01	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	981	1744	381	387	594	223	152	1668	362	127	1374	109
Future Volume (vph)	981	1744	381	387	594	223	152	1668	362	127	1374	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3471	4520	1585	3471	4309	1633	3054	4175	1566	2918	4214	1268
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1001	1780	389	395	606	228	155	1702	369	130	1402	111
RTOR Reduction (vph)	0	0	73	0	0	93	0	0	137	0	0	74
Lane Group Flow (vph)	1001	1780	316	395	606	135	155	1702	232	130	1402	37
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	35.0	54.1	54.1	13.0	32.1	32.1	7.0	44.2	44.2	7.0	44.2	44.2
Effective Green, g (s)	36.0	56.1	56.1	14.0	34.1	34.1	8.0	46.2	46.2	8.0	46.2	46.2
Actuated g/C Ratio	0.26	0.40	0.40	0.10	0.24	0.24	0.06	0.33	0.33	0.06	0.33	0.33
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	892	1811	635	347	1049	397	174	1377	516	166	1390	418
v/s Ratio Prot	c0.29	c0.39		0.11	0.14		c0.05	c0.41		0.04	0.33	
v/s Ratio Perm			0.20			0.08			0.15			0.03
v/c Ratio	1.12	0.98	0.50	1.14	0.58	0.34	0.89	1.24	0.45	0.78	1.01	0.09
Uniform Delay, d1	52.0	41.5	31.4	63.0	46.6	43.7	65.6	46.9	36.9	65.1	46.9	32.4
Progression Factor	1.37	1.14	1.35	1.02	1.00	1.09	1.24	0.92	1.08	0.79	1.02	2.29
Incremental Delay, d2	56.6	3.5	0.3	90.1	2.2	2.2	24.4	109.5	0.6	20.7	24.3	0.2
Delay (s)	127.7	50.7	42.6	154.1	48.7	49.9	106.0	152.7	40.6	72.3	71.9	74.1
Level of Service	F	D	D	F	D	D	F	F	D	E	E	E
Approach Delay (s/veh)		74.0			82.8			130.9			72.1	
Approach LOS		E			F			F			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	90.3	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.13			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	97.5%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

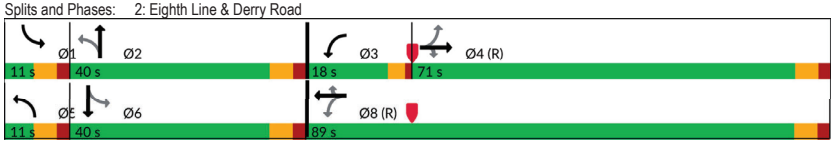
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1759	115	89	1042	21	103	30	59	8	10	11
Future Volume (vph)	36	1759	115	89	1042	21	103	30	59	8	10	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.901			0.921	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1665	0	1217	1626	0
Flt Permitted	0.215			0.053			0.448			0.697		
Satd. Flow (perm)	291	4520	1601	102	4391	1633	861	1665	0	893	1626	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		61			11	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Adj. Flow (vph)	38	1832	120	93	1085	22	107	31	61	8	10	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	1832	120	93	1085	22	107	92	0	8	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.5	36.0	36.0	11.0	36.0		11.0	36.0	
Total Split (s)	71.0	71.0	71.0	18.0	89.0	89.0	11.0	40.0		11.0	40.0	
Total Split (%)	50.7%	50.7%	50.7%	12.9%	63.6%	63.6%	7.9%	28.6%		7.9%	28.6%	
Maximum Green (s)	65.0	65.0	65.0	14.0	83.0	83.0	5.0	34.0		5.0	34.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0		23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0			0	
Act Effct Green (s)	93.6	93.6	93.6	108.4	106.4	106.4	20.4	19.2		12.7	10.7	
Actuated g/C Ratio	0.67	0.67	0.67	0.77	0.76	0.76	0.15	0.14		0.09	0.08	
v/c Ratio	0.20	0.61	0.11	0.50	0.33	0.02	0.53	0.33		0.09	0.16	
Control Delay (s/veh)	11.4	20.0	4.5	22.6	6.4	0.0	62.5	33.2		47.8	40.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	11.4	20.0	4.5	22.6	6.4	0.0	62.5	33.2		47.8	40.2	
LOS	B	B	A	C	A	A	E	C		D	D	
Approach Delay (s/veh)		18.9			7.5			49.0			42.2	
Approach LOS		B			A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay (s/veh): 16.8		Intersection LOS: B	
Intersection Capacity Utilization 64.6%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	38	1832	120	93	1085	22	107	92	8	21
v/c Ratio	0.20	0.61	0.11	0.50	0.33	0.02	0.53	0.33	0.09	0.16
Control Delay (s/veh)	11.4	20.0	4.5	22.6	6.4	0.0	62.5	33.2	47.8	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.4	20.0	4.5	22.6	6.4	0.0	62.5	33.2	47.8	40.2
Queue Length 50th (m)	9.0	151.2	10.4	6.9	46.7	0.0	29.7	15.6	2.5	2.7
Queue Length 95th (m)	m8.4	244.0	m12.0	22.1	48.6	0.0	#53.8	29.6	9.6	11.1
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	194	3020	1103	251	3337	1258	203	450	94	403
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.61	0.11	0.37	0.33	0.02	0.53	0.20	0.09	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1759	115	89	1042	21	103	30	59	8	10	11
Future Volume (vph)	36	1759	115	89	1042	21	103	30	59	8	10	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90		1.00	0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1664		1217	1627	
Flt Permitted	0.21	1.00	1.00	0.05	1.00	1.00	0.45	1.00		0.70	1.00	
Satd. Flow (perm)	291	4520	1601	102	4391	1633	861	1664		893	1627	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	38	1832	120	93	1085	22	107	31	61	8	10	11
RTOR Reduction (vph)	0	0	37	0	0	6	0	53	0	0	10	0
Lane Group Flow (vph)	38	1832	83	93	1085	16	107	39	0	8	11	0
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	88.7	88.7	88.7	101.6	101.6	101.6	26.4	19.2		10.3	9.1	
Effective Green, g (s)	88.7	88.7	88.7	101.6	101.6	101.6	26.4	19.2		10.3	9.1	
Actuated g/C Ratio	0.63	0.63	0.63	0.73	0.73	0.73	0.19	0.14		0.07	0.07	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	184	2863	1014	183	3186	1185	240	228		68	105	
v/s Ratio Prot		c0.41		c0.03	0.25		c0.04	0.02		0.00	0.01	
v/s Ratio Perm	0.13		0.05	0.34		0.01	c0.05			0.01		
v/c Ratio	0.21	0.64	0.08	0.51	0.34	0.01	0.45	0.17		0.12	0.10	
Uniform Delay, d1	10.8	15.8	9.9	15.9	7.0	5.3	49.1	53.4		60.5	61.6	
Progression Factor	0.78	1.32	1.49	1.00	1.00	1.00	1.01	1.42		1.00	1.00	
Incremental Delay, d2	1.7	0.8	0.1	2.2	0.3	0.0	1.3	0.4		0.8	0.4	
Delay (s)	10.2	21.6	14.9	18.1	7.3	5.3	50.8	76.1		61.3	62.0	
Level of Service	B	C	B	B	A	A	D	E		E	E	
Approach Delay (s/veh)		21.0			8.1			62.5			61.8	
Approach LOS		C			A			E			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	506	929	474	213	380	124	195	1583	240	99	1941	351
Future Volume (vph)	506	929	474	213	380	124	195	1583	240	99	1941	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			106			125			171			355
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	511	938	479	215	384	125	197	1599	242	100	1961	355
Shared Lane Traffic (%)												
Lane Group Flow (vph)	511	938	479	215	384	125	197	1599	242	100	1961	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	22.0	47.0	47.0	15.0	40.0	40.0	12.0	67.0	67.0	11.0	66.0	66.0
Total Split (%)	15.7%	33.6%	33.6%	10.7%	28.6%	28.6%	8.6%	47.9%	47.9%	7.9%	47.1%	47.1%
Maximum Green (s)	18.0	41.0	41.0	11.0	34.0	34.0	8.0	60.0	60.0	7.0	59.0	59.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	19.0	40.7	40.7	11.8	33.6	33.6	11.2	64.1	64.1	8.3	61.2	61.2
Actuated g/C Ratio	0.14	0.29	0.29	0.08	0.24	0.24	0.08	0.46	0.46	0.06	0.44	0.44
v/c Ratio	1.12	0.72	0.91	0.73	0.36	0.26	0.86	0.82	0.30	0.58	1.04	0.45
Control Delay (s/veh)	132.2	47.9	58.9	65.6	45.0	22.1	68.4	51.0	22.7	76.3	58.6	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	132.2	47.9	58.9	65.6	45.0	22.1	68.4	51.0	22.7	76.3	58.6	5.7
LOS	F	D	E	E	D	C	E	D	C	E	E	A
Approach Delay (s/veh)		73.0			47.2			49.3			51.5	
Approach LOS		E			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay (s/veh): 56.3		Intersection LOS: E	
Intersection Capacity Utilization 84.4%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	511	938	479	215	384	125	197	1599	242	100	1961	355
v/c Ratio	1.12	0.72	0.91	0.73	0.36	0.26	0.86	0.82	0.30	0.58	1.04	0.45
Control Delay (s/veh)	132.2	47.9	58.9	65.6	45.0	22.1	68.4	51.0	22.7	76.3	58.6	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	132.2	47.9	58.9	65.6	45.0	22.1	68.4	51.0	22.7	76.3	58.6	5.7
Queue Length 50th (m)	~86.9	97.2	105.8	30.7	42.2	9.2	~34.9	157.2	28.1	14.6	~261.7	25.3
Queue Length 95th (m)	#123.5	115.8	#169.3	#45.0	56.2	33.8	m#37.6	m154.5	m29.5	m16.9	m#255.6	m29.9
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	457	1374	551	300	1139	512	229	1947	809	172	1878	797
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.68	0.87	0.72	0.34	0.24	0.86	0.82	0.30	0.58	1.04	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	506	929	474	213	380	124	195	1583	240	99	1941	351
Future Volume (vph)	506	929	474	213	380	124	195	1583	240	99	1941	351
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	511	938	479	215	384	125	197	1599	242	100	1961	355
RTOR Reduction (vph)	0	0	75	0	0	95	0	0	93	0	0	200
Lane Group Flow (vph)	511	938	404	215	384	30	197	1599	149	100	1961	155
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	18.0	38.8	38.8	10.8	31.6	31.6	10.2	62.1	62.1	7.3	59.2	59.2
Effective Green, g (s)	19.0	40.8	40.8	11.8	33.6	33.6	11.2	64.1	64.1	8.3	61.2	61.2
Actuated g/C Ratio	0.14	0.29	0.29	0.08	0.24	0.24	0.08	0.46	0.46	0.06	0.44	0.44
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	457	1304	453	295	1063	391	229	1947	717	171	1877	596
v/s Ratio Prot	c0.15	0.21		0.06	0.09		c0.07	c0.38		0.03	c0.46	
v/s Ratio Perm			c0.26			0.02			0.10			0.11
v/c Ratio	1.12	0.72	0.89	0.73	0.36	0.08	0.86	0.82	0.21	0.58	1.04	0.26
Uniform Delay, d1	60.5	44.5	47.5	62.5	44.3	41.2	63.6	33.0	22.7	64.2	39.4	25.0
Progression Factor	1.00	1.00	1.00	0.82	1.00	3.14	0.88	1.47	2.95	1.07	0.78	2.01
Incremental Delay, d2	78.4	1.9	19.3	8.6	0.2	0.1	9.4	1.2	0.2	2.5	27.9	0.5
Delay (s)	138.9	46.4	66.8	59.7	44.6	129.6	65.3	49.6	67.2	71.4	58.6	50.7
Level of Service	F	D	E	E	D	F	E	D	E	E	E	D
Approach Delay (s/veh)		76.0			63.8			53.2			58.0	
Approach LOS		E			E			D			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	62.1	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.00			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	84.4%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

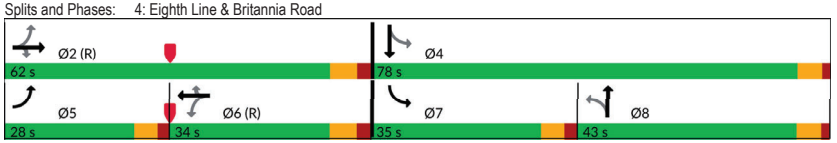
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	1146	13	25	674	64	19	114	28	52	124	23
Future Volume (vph)	28	1146	13	25	674	64	19	114	28	52	124	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.970			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1778	0	1825	1875	0
Flt Permitted	0.308			0.194			0.661			0.351		
Satd. Flow (perm)	592	4476	1306	373	4476	1633	1165	1778	0	674	1875	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		9			10	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	29	1169	13	26	688	65	19	116	29	53	127	24
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	1169	13	26	688	65	19	145	0	53	151	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	28.0	62.0	62.0	34.0	34.0	34.0	43.0	43.0		35.0	78.0	
Total Split (%)	20.0%	44.3%	44.3%	24.3%	24.3%	24.3%	30.7%	30.7%		25.0%	55.7%	
Maximum Green (s)	22.0	55.2	55.2	27.2	27.2	27.2	37.3	37.3		29.0	72.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	98.1	97.3	97.3	89.7	89.7	89.7	17.4	17.4		29.9	30.2	
Actuated g/C Ratio	0.70	0.70	0.70	0.64	0.64	0.64	0.12	0.12		0.21	0.22	
v/c Ratio	0.06	0.38	0.01	0.11	0.24	0.06	0.13	0.63		0.24	0.37	
Control Delay (s/veh)	23.3	31.7	3.4	16.1	12.9	0.2	66.2	77.1		40.3	39.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	23.3	31.7	3.4	16.1	12.9	0.2	66.2	77.1		40.3	39.4	
LOS	C	C	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		31.2			11.9			75.9			39.7	
Approach LOS		C			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay (s/veh): 28.7		Intersection LOS: C	
Intersection Capacity Utilization 63.4%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	1169	13	26	688	65	19	145	53	151
v/c Ratio	0.06	0.38	0.01	0.11	0.24	0.06	0.13	0.63	0.24	0.37
Control Delay (s/veh)	23.3	31.7	3.4	16.1	12.9	0.2	66.2	77.1	40.3	39.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.3	31.7	3.4	16.1	12.9	0.2	66.2	77.1	40.3	39.4
Queue Length 50th (m)	5.5	120.7	0.0	3.0	36.5	0.0	4.7	32.7	10.0	27.9
Queue Length 95th (m)	m10.4	139.6	m0.0	9.5	54.5	0.5	m10.2	46.8	14.5	30.9
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	608	3110	928	238	2867	1087	310	480	396	973
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.38	0.01	0.11	0.24	0.06	0.06	0.30	0.13	0.16

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	1146	13	25	674	64	19	114	28	52	124	23
Future Volume (vph)	28	1146	13	25	674	64	19	114	28	52	124	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1778		1825	1875	
Flt Permitted	0.31	1.00	1.00	0.19	1.00	1.00	0.66	1.00		0.35	1.00	
Satd. Flow (perm)	593	4476	1306	373	4476	1633	1165	1778		674	1875	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	29	1169	13	26	688	65	19	116	29	53	127	24
RTOR Reduction (vph)	0	0	4	0	0	25	0	8	0	0	8	0
Lane Group Flow (vph)	29	1169	9	26	688	40	19	137	0	53	143	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	96.1	96.1	96.1	86.1	86.1	86.1	17.4	17.4		31.4	31.4	
Effective Green, g (s)	96.1	96.1	96.1	86.1	86.1	86.1	17.4	17.4		31.4	31.4	
Actuated g/C Ratio	0.69	0.69	0.69	0.62	0.62	0.62	0.12	0.12		0.22	0.22	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	442	3072	896	229	2752	1004	144	220		216	420	
v/s Ratio Prot	0.00	c0.26			0.15			c0.08		0.01	c0.08	
v/s Ratio Perm	0.04		0.01	0.07		0.02	0.02			0.04		
v/c Ratio	0.07	0.38	0.01	0.11	0.25	0.04	0.13	0.62		0.25	0.34	
Uniform Delay, d1	7.3	9.3	6.9	11.2	12.3	10.6	54.6	58.2		43.8	45.6	
Progression Factor	2.72	3.20	1.00	1.00	1.00	1.00	1.21	1.20		0.92	0.89	
Incremental Delay, d2	0.1	0.3	0.0	1.0	0.2	0.1	0.4	5.1		0.6	0.5	
Delay (s)	20.0	30.1	6.9	12.2	12.5	10.7	66.3	74.8		40.8	41.1	
Level of Service	C	C	A	B	B	B	E	E		D	D	
Approach Delay (s/veh)		29.6			12.3			73.9			41.0	
Approach LOS		C			B			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	28.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		

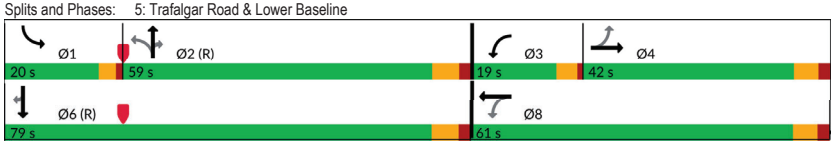
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	471	96	296	178	193	46	1708	213	472	2087	86
Future Volume (vph)	182	471	96	296	178	193	46	1708	213	472	2087	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt		0.975			0.922				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	1851	0	1789	1702	0	1631	4214	1551	3319	4295	1521
Flt Permitted	0.533			0.099			0.075			0.950		
Satd. Flow (perm)	975	1851	0	186	1702	0	129	4214	1551	3319	4295	1521
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			47				128			60
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	190	491	100	308	185	201	46	1708	213	492	2174	90
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	591	0	308	386	0	46	1708	213	492	2174	90
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2		2			6
Detector Phase	4	4		3	8		2	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0		7.0	10.0		25.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	24.2	24.2		11.5	24.2		31.6	31.6	31.6	11.0	31.6	31.6
Total Split (s)	42.0	42.0		19.0	61.0		59.0	59.0	59.0	20.0	79.0	79.0
Total Split (%)	30.0%	30.0%		13.6%	43.6%		42.1%	42.1%	42.1%	14.3%	56.4%	56.4%
Maximum Green (s)	35.8	35.8		14.5	54.8		52.4	52.4	52.4	16.0	72.4	72.4
Yellow Time (s)	4.2	4.2		3.5	4.2		4.6	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	2.0	2.0		1.0	2.0		2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	5.2	4.2		3.5	4.2		5.6	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lag	Lag		Lead			Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		C-Max	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0							
Flash Don't Walk (s)					11.0							
Pedestrian Calls (#/hr)					0							
Act Effct Green (s)	36.8	37.8		57.5	56.8		53.4	54.4	54.4	17.0	74.4	74.4
Actuated g/C Ratio	0.26	0.27		0.41	0.41		0.38	0.39	0.39	0.12	0.53	0.53
v/c Ratio	0.74	1.17		1.22	0.54		0.94	1.04	0.31	1.22	0.95	0.11
Control Delay (s/veh)	66.0	141.1		161.3	39.5		157.3	76.0	13.0	152.2	53.2	17.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.0	141.1		161.3	39.5		157.3	76.0	13.0	152.2	53.2	17.0
LOS	E	F		F	D		F	E	B	F	D	B
Approach Delay (s/veh)		122.8			93.6			71.1			69.7	
Approach LOS		F			F			E			E	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 110		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.22		
Intersection Signal Delay (s/veh): 79.5	Intersection LOS: E	
Intersection Capacity Utilization 123.5%	ICU Level of Service H	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	190	591	308	386	46	1708	213	492	2174	90
v/c Ratio	0.74	1.17	1.22	0.54	0.94	1.04	0.31	1.22	0.95	0.11
Control Delay (s/veh)	66.0	141.1	161.3	39.5	157.3	76.0	13.0	152.2	53.2	17.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	66.0	141.1	161.3	39.5	157.3	76.0	13.0	152.2	53.2	17.0
Queue Length 50th (m)	50.4	~195.2	~89.7	88.1	12.9	~224.7	15.5	~88.7	246.1	10.0
Queue Length 95th (m)	#87.7	#268.1	#150.0	121.9	#41.5	#260.2	35.2	m#92.1	m243.0	m10.9
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	256	504	253	718	49	1637	680	403	2282	836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	1.17	1.22	0.54	0.94	1.04	0.31	1.22	0.95	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	471	96	296	178	193	46	1708	213	472	2087	86
Future Volume (vph)	182	471	96	296	178	193	46	1708	213	472	2087	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	5.2	4.2		3.5	4.2		5.6	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	0.97		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1738	1851		1789	1702		1631	4214	1551	3319	4295	1521
Flt Permitted	0.53	1.00		0.10	1.00		0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	976	1851		187	1702		129	4214	1551	3319	4295	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	190	491	100	308	185	201	46	1708	213	492	2174	90
RTOR Reduction (vph)	0	5	0	0	28	0	0	0	78	0	0	28
Lane Group Flow (vph)	190	586	0	308	358	0	46	1708	135	492	2174	62
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4			8			2		2			6
Actuated Green, G (s)	35.8	35.8		54.8	54.8		52.4	52.4	52.4	16.0	72.4	72.4
Effective Green, g (s)	36.8	37.8		55.8	56.8		53.4	54.4	54.4	17.0	74.4	74.4
Actuated g/C Ratio	0.26	0.27		0.40	0.41		0.38	0.39	0.39	0.12	0.53	0.53
Clearance Time (s)	6.2	6.2		4.5	6.2		6.6	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	5.0	5.0		3.0	5.0		5.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	256	499		251	690		49	1637	602	403	2282	808
v/s Ratio Prot		0.32		c0.14	0.21			c0.41		c0.15	0.51	
v/s Ratio Perm	0.19			c0.35			0.36		0.09			0.04
v/c Ratio	0.74	1.17		1.23	0.52		0.94	1.04	0.22	1.22	0.95	0.08
Uniform Delay, d1	47.3	51.1		42.1	31.3		41.7	42.8	28.7	61.5	31.1	16.0
Progression Factor	1.00	1.00		1.05	1.32		1.00	1.00	1.00	0.89	1.58	2.59
Incremental Delay, d2	13.1	97.8		130.0	1.2		111.6	34.5	0.9	106.8	4.3	0.1
Delay (s)	60.4	148.9		174.3	42.6		153.3	77.3	29.5	161.3	53.4	41.6
Level of Service	E	F		F	D		F	E	C	F	D	D
Approach Delay (s/veh)		127.4			101.1			73.9			72.3	
Approach LOS		F			F			E			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	83.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	123.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

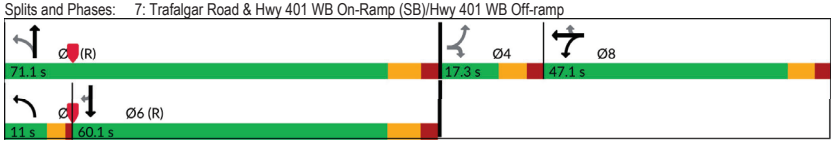
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	359	6	280	12	724	0	0	1355	117
Future Volume (vph)	0	0	6	359	6	280	12	724	0	0	1355	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1633	2879	1921	2456	1825	3941	0	0	4309	1276
Flt Permitted				0.950			0.119					
Satd. Flow (perm)	1883	0	1633	2879	1921	2456	229	3941	0	0	4309	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			171			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Adj. Flow (vph)	0	0	6	359	6	280	12	724	0	0	1355	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	6	359	6	280	12	724	0	0	1355	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	21.5	21.5	21.5	99.5	95.4			91.0	91.0
Actuated g/C Ratio			0.07	0.16	0.16	0.16	0.73	0.70			0.67	0.67
v/c Ratio			0.02	0.79	0.02	0.45	0.05	0.26			0.47	0.13
Control Delay (s/veh)			0.2	67.3	45.2	7.4	8.3	8.8			13.8	2.8
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.2	67.3	45.2	7.4	8.3	8.8			13.8	2.8
LOS			A	E	D	A	A	A			B	A
Approach Delay (s/veh)		0.2			41.1			8.8			13.0	
Approach LOS		A			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	6	359	6	280	12	724	1355	117
v/c Ratio	0.02	0.79	0.02	0.45	0.05	0.26	0.47	0.13
Control Delay (s/veh)	0.2	67.3	45.2	7.4	8.3	8.8	13.8	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.2	67.3	45.2	7.4	8.3	8.8	13.8	2.8
Queue Length 50th (m)	0.0	57.1	1.4	0.0	0.7	27.2	56.4	0.0
Queue Length 95th (m)	0.0	73.6	5.2	14.4	4.0	59.0	138.7	11.3
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	278	849	567	922	250	2774	2893	897
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.42	0.01	0.30	0.05	0.26	0.47	0.13

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	6	359	6	280	12	724	0	0	1355	117
Future Volume (vph)	0	0	6	359	6	280	12	724	0	0	1355	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3941			4309	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.12	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	229	3941			4309	1276
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	6	359	6	280	12	724	0	0	1355	117
RTOR Reduction (vph)	0	0	6	0	0	236	0	0	0	0	0	46
Lane Group Flow (vph)	0	0	0	359	6	44	12	724	0	0	1355	71
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	21.5	21.5	21.5	89.5	89.5			82.7	82.7
Effective Green, g (s)			2.0	21.5	21.5	21.5	89.5	89.5			82.7	82.7
Actuated g/C Ratio			0.01	0.16	0.16	0.16	0.66	0.66			0.61	0.61
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	456	304	389	184	2603			2629	778
v/s Ratio Prot				c0.12	0.00		0.00	c0.18			c0.31	
v/s Ratio Perm			c0.00			0.02	0.04					0.06
v/c Ratio			0.00	0.79	0.02	0.11	0.07	0.28			0.52	0.09
Uniform Delay, d1			65.8	54.8	48.1	48.8	9.4	9.6			15.0	10.9
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	8.1	0.0	0.0	0.1	0.3			0.7	0.2
Delay (s)			65.8	62.9	48.1	48.9	9.5	9.8			15.7	11.1
Level of Service			E	E	D	D	A	A			B	B
Approach Delay (s/veh)		65.8			56.7			9.8			15.4	
Approach LOS		E			E			A			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	23.4	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.56				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5		
Intersection Capacity Utilization	63.5%	ICU Level of Service	B		
Analysis Period (min)	15				
c Critical Lane Group					

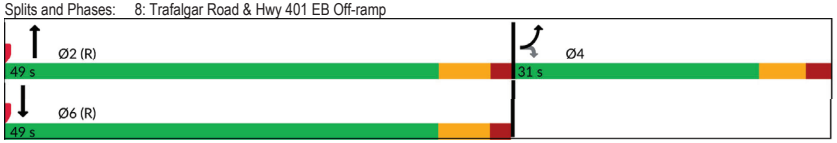
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	776	0	1256	965	0
Future Volume (vph)	114	776	0	1256	965	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.884	0.850				
Flt Protected	0.989					
Satd. Flow (prot)	2826	1339	0	4154	4117	0
Flt Permitted	0.989					
Satd. Flow (perm)	2826	1339	0	4154	4117	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	95	95				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Adj. Flow (vph)	114	776	0	1256	965	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	502	388	0	1256	965	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	23.5	23.5		42.5	42.5	
Actuated g/C Ratio	0.29	0.29		0.53	0.53	
v/c Ratio	0.56	0.84		0.57	0.44	
Control Delay (s/veh)	20.9	36.9		14.8	13.1	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.9	36.9		14.8	13.1	
LOS	C	D		B	B	
Approach Delay (s/veh)	27.9			14.8	13.1	
Approach LOS	C			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay (s/veh): 18.0		Intersection LOS: B	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	502	388	1256	965
v/c Ratio	0.56	0.84	0.57	0.44
Control Delay (s/veh)	20.9	36.9	14.8	13.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.9	36.9	14.8	13.1
Queue Length 50th (m)	31.2	48.2	58.2	41.0
Queue Length 95th (m)	47.4	#98.5	76.8	55.3
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	979	498	2305	2284
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.51	0.78	0.54	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	776	0	1256	965	0
Future Volume (vph)	114	776	0	1256	965	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.88	0.85		1.00	1.00	
Flt Protected	0.99	1.00		1.00	1.00	
Satd. Flow (prot)	2825	1339		4154	4117	
Flt Permitted	0.99	1.00		1.00	1.00	
Satd. Flow (perm)	2825	1339		4154	4117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	776	0	1256	965	0
RTOR Reduction (vph)	67	67	0	0	0	0
Lane Group Flow (vph)	435	321	0	1256	965	0
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	23.5	23.5		42.5	42.5	
Effective Green, g (s)	23.5	23.5		42.5	42.5	
Actuated g/C Ratio	0.29	0.29		0.53	0.53	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	829	393		2206	2187	
v/s Ratio Prot	0.15			c0.30	0.23	
v/s Ratio Perm		c0.24				
v/c Ratio	0.52	0.82		0.57	0.44	
Uniform Delay, d1	23.6	26.2		12.6	11.5	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	12.3		1.1	0.6	
Delay (s)	24.2	38.6		13.7	12.1	
Level of Service	C	D		B	B	
Approach Delay (s/veh)	30.5			13.7	12.1	
Approach LOS	C			B	B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

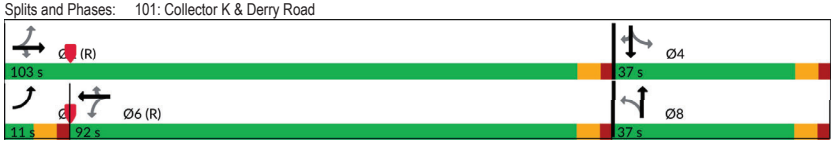
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	3040	65	6	963	12	283	0	11	65	0	24
Future Volume (vph)	36	3040	65	6	963	12	283	0	11	65	0	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.184			0.046			0.757			0.750		
Satd. Flow (perm)	347	4520	1601	87	4520	1601	1426	1601	0	1413	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			33			70		70				168
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	3304	71	7	1047	13	308	0	12	71	0	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	39	3304	71	7	1047	13	308	12	0	71	0	26
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	103.0	103.0	92.0	92.0	92.0	37.0	37.0		37.0	37.0	37.0
Total Split (%)	7.9%	73.6%	73.6%	65.7%	65.7%	65.7%	26.4%	26.4%		26.4%	26.4%	26.4%
Maximum Green (s)	5.0	97.0	97.0	86.0	86.0	86.0	31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		None	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	97.0	97.0	97.0	88.2	88.2	88.2	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.63	0.63	0.63	0.22	0.22		0.22		0.22
v/c Ratio	0.13	1.06	0.06	0.13	0.37	0.01	0.98	0.03		0.23		0.05
Control Delay (s/veh)	7.8	55.4	4.1	8.5	3.8	0.0	99.2	0.1		47.0		0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	7.8	55.4	4.1	8.5	3.8	0.0	99.2	0.1		47.0		0.2
LOS	A	E	A	A	A	A	F	A		D		A
Approach Delay (s/veh)		53.8			3.8			95.5			34.5	
Approach LOS		D			A			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay (s/veh): 45.2		Intersection LOS: D	
Intersection Capacity Utilization 91.1%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	39	3304	71	7	1047	13	308	12	71	26
v/c Ratio	0.13	1.06	0.06	0.13	0.37	0.01	0.98	0.03	0.23	0.05
Control Delay (s/veh)	7.8	55.4	4.1	8.5	3.8	0.0	99.2	0.1	47.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.8	55.4	4.1	8.5	3.8	0.0	99.2	0.1	47.0	0.2
Queue Length 50th (m)	3.2	~422.7	3.1	0.2	13.4	0.0	86.9	0.0	16.5	0.0
Queue Length 95th (m)	6.8	#447.2	7.9	m0.6	19.0	m0.0	#146.6	0.0	30.8	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	291	3131	1119	54	2847	1034	315	409	312	485
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	1.06	0.06	0.13	0.37	0.01	0.98	0.03	0.23	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	3040	65	6	963	12	283	0	11	65	0	24
Future Volume (vph)	36	3040	65	6	963	12	283	0	11	65	0	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601		1789		1601
Flt Permitted	0.18	1.00	1.00	0.05	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	346	4520	1601	87	4520	1601	1426	1601		1412		1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	3304	71	7	1047	13	308	0	12	71	0	26
RTOR Reduction (vph)	0	0	10	0	0	5	0	9	0	0	0	20
Lane Group Flow (vph)	39	3304	61	7	1047	8	308	3	0	71	0	6
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	97.0	97.0	97.0	87.0	87.0	87.0	31.0	31.0		31.0		31.0
Effective Green, g (s)	97.0	97.0	97.0	87.0	87.0	87.0	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.62	0.62	0.62	0.22	0.22		0.22		0.22
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	280	3131	1109	54	2808	994	315	354		312		354
v/s Ratio Prot	0.00	c0.73			0.23			0.00				
v/s Ratio Perm	0.09		0.04	0.08		0.01	c0.22			0.05		0.00
v/c Ratio	0.14	1.06	0.05	0.13	0.37	0.01	0.98	0.01		0.23		0.02
Uniform Delay, d1	7.9	21.5	6.9	10.9	13.1	10.1	54.2	42.5		44.7		42.6
Progression Factor	1.00	1.00	1.00	0.31	0.27	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.2	33.1	0.1	4.4	0.3	0.0	44.2	0.0		0.4		0.0
Delay (s)	8.1	54.6	7.0	7.8	3.9	10.1	98.3	42.5		45.1		42.6
Level of Service	A	D	A	A	A	B	F	D		D		D
Approach Delay (s/veh)		53.1			4.0			96.2			44.4	
Approach LOS		D			A			F			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	45.0	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	1.09			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0	
Intersection Capacity Utilization	91.1%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2077	44	0	1122	8	0	0	21	0	0	80
Future Volume (vph)	0	2077	44	0	1122	8	0	0	21	0	0	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2258	48	0	1220	9	0	0	23	0	0	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2258	48	0	1229	0	0	0	23	0	0	87
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2077	44	0	1122	8	0	0	21	0	0	80
Future Volume (Veh/h)	0	2077	44	0	1122	8	0	0	21	0	0	80
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2258	48	0	1220	9	0	0	23	0	0	87
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.93			0.62			0.65	0.65	0.62	0.65	0.65	0.93
vC, conflicting volume	1229			2306			2752	3487	753	2000	3531	411
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1000			967			1151	2276	0	1	2343	125
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	97	100	100	90
cM capacity (veh/h)	643			440			90	26	673	644	23	843

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	753	753	753	48	488	488	253	23	87
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	48	0	0	9	23	87
cSH	1700	1700	1700	1700	1700	1700	1700	673	843
Volume to Capacity	0.44	0.44	0.44	0.03	0.29	0.29	0.15	0.03	0.10
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5	9.8
Lane LOS								B	A
Approach Delay (s/veh)	0.0				0.0			10.5	9.8
Approach LOS								B	A

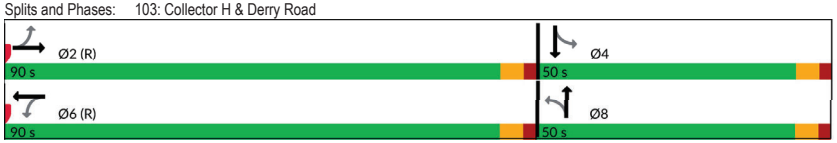
Intersection Summary					
Average Delay	0.3				
Intersection Capacity Utilization	50.1%	ICU Level of Service		A	
Analysis Period (min)	15				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	1971	51	14	1100	17	207	0	18	21	3	27
Future Volume (vph)	106	1971	51	14	1100	17	207	0	18	21	3	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.996			0.998			0.989			0.929	
Flt Protected	0.950			0.950				0.956			0.980	
Satd. Flow (prot)	1789	4502	0	1789	4511	0	0	1781	0	0	1715	0
Flt Permitted	0.165			0.041				0.737			0.872	
Satd. Flow (perm)	311	4502	0	77	4511	0	0	1373	0	0	1526	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			2			23			29	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	115	2142	55	15	1196	18	225	0	20	23	3	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	115	2197	0	15	1214	0	0	245	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	90.0	90.0		90.0	90.0		50.0	50.0		50.0	50.0	
Total Split (%)	64.3%	64.3%		64.3%	64.3%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	84.0	84.0		84.0	84.0		44.0	44.0		44.0	44.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	98.4	98.4		98.4	98.4			29.6			29.6	
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.21			0.21	
v/c Ratio	0.53	0.69		0.28	0.38			0.80			0.16	
Control Delay (s/veh)	13.6	11.5		22.4	7.1			65.0			20.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	13.6	11.5		22.4	7.1			65.0			20.9	
LOS	B	B		C	A			E			C	
Approach Delay (s/veh)		11.6			7.2			65.0			20.9	
Approach LOS		B			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay (s/veh): 13.7		Intersection LOS: B	
Intersection Capacity Utilization 90.1%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	115	2197	15	1214	245	55
v/c Ratio	0.53	0.69	0.28	0.38	0.80	0.16
Control Delay (s/veh)	13.6	11.5	22.4	7.1	65.0	20.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.6	11.5	22.4	7.1	65.0	20.9
Queue Length 50th (m)	11.6	96.5	1.1	41.7	60.1	4.7
Queue Length 95th (m)	m5.2	m36.8	m2.8	42.2	83.6	m15.1
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	218	3166	54	3171	447	499
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.69	0.28	0.38	0.55	0.11

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	1971	51	14	1100	17	207	0	18	21	3	27
Future Volume (vph)	106	1971	51	14	1100	17	207	0	18	21	3	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.99			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1789	4503		1789	4510			1781			1714	
Flt Permitted	0.16	1.00		0.04	1.00			0.74			0.87	
Satd. Flow (perm)	310	4503		77	4510			1373			1526	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	115	2142	55	15	1196	18	225	0	20	23	3	29
RTOR Reduction (vph)	0	1	0	0	1	0	0	18	0	0	23	0
Lane Group Flow (vph)	115	2196	0	15	1213	0	0	227	0	0	32	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	98.4	98.4		98.4	98.4			29.6			29.6	
Effective Green, g (s)	98.4	98.4		98.4	98.4			29.6			29.6	
Actuated g/C Ratio	0.70	0.70		0.70	0.70			0.21			0.21	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	217	3164		54	3169			290			322	
v/s Ratio Prot		c0.49			0.27							
v/s Ratio Perm	0.37			0.20				c0.17			0.02	
v/c Ratio	0.53	0.69		0.28	0.38			0.78			0.10	
Uniform Delay, d1	9.8	12.1		7.7	8.5			52.2			44.5	
Progression Factor	0.64	0.81		0.76	0.72			1.00			0.90	
Incremental Delay, d2	4.2	0.6		11.1	0.3			12.9			0.1	
Delay (s)	10.6	10.3		17.0	6.4			65.0			40.2	
Level of Service	B	B		B	A			E			D	
Approach Delay (s/veh)		10.4			6.6			65.0			40.2	
Approach LOS		B			A			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	13.1	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.71				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	90.1%	ICU Level of Service		E	
Analysis Period (min)	15				

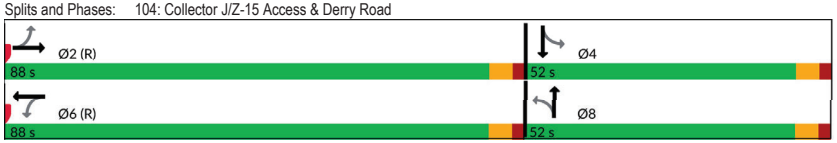
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1892	67	8	1090	36	271	0	24	8	0	27
Future Volume (vph)	100	1892	67	8	1090	36	271	0	24	8	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.995			0.989			0.897	
Flt Protected	0.950			0.950				0.956			0.988	
Satd. Flow (prot)	1789	4498	0	1789	4498	0	0	1781	0	0	1669	0
Flt Permitted	0.155			0.044				0.716			0.913	
Satd. Flow (perm)	292	4498	0	83	4498	0	0	1334	0	0	1542	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			5			23			29	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	2057	73	9	1185	39	295	0	26	9	0	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	109	2130	0	9	1224	0	0	321	0	0	38	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	88.0	88.0		88.0	88.0		52.0	52.0		52.0	52.0	
Total Split (%)	62.9%	62.9%		62.9%	62.9%		37.1%	37.1%		37.1%	37.1%	
Maximum Green (s)	82.0	82.0		82.0	82.0		46.0	46.0		46.0	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	91.4	91.4		91.4	91.4			36.6			36.6	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
v/c Ratio	0.57	0.72		0.17	0.42			0.88			0.09	
Control Delay (s/veh)	22.6	14.8		20.1	11.3			69.7			15.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	22.6	14.8		20.1	11.3			69.7			15.0	
LOS	C	B		C	B			E			B	
Approach Delay (s/veh)		15.2			11.3			69.7			15.0	
Approach LOS		B			B			E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 18.5		Intersection LOS: B	
Intersection Capacity Utilization 92.9%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	109	2130	9	1224	321	38
v/c Ratio	0.57	0.72	0.17	0.42	0.88	0.09
Control Delay (s/veh)	22.6	14.8	20.1	11.3	69.7	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.6	14.8	20.1	11.3	69.7	15.0
Queue Length 50th (m)	7.6	157.3	0.8	57.5	80.9	1.9
Queue Length 95th (m)	m12.5	74.7	m3.5	75.1	110.1	10.0
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	190	2938	54	2938	453	526
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.72	0.17	0.42	0.71	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1892	67	8	1090	36	271	0	24	8	0	27
Future Volume (vph)	100	1892	67	8	1090	36	271	0	24	8	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.99			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4497		1789	4499			1781			1670	
Flt Permitted	0.16	1.00		0.04	1.00			0.72			0.91	
Satd. Flow (perm)	293	4497		82	4499			1333			1542	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	2057	73	9	1185	39	295	0	26	9	0	29
RTOR Reduction (vph)	0	2	0	0	2	0	0	17	0	0	21	0
Lane Group Flow (vph)	109	2128	0	9	1222	0	0	304	0	0	17	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	91.4	91.4		91.4	91.4			36.6			36.6	
Effective Green, g (s)	91.4	91.4		91.4	91.4			36.6			36.6	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	191	2935		53	2937			348			403	
v/s Ratio Prot		c0.47			0.27							
v/s Ratio Perm	0.37			0.11				c0.23			0.01	
v/c Ratio	0.57	0.73		0.17	0.42			0.87			0.04	
Uniform Delay, d1	13.4	16.0		9.5	11.6			49.5			38.6	
Progression Factor	0.69	0.78		0.90	0.87			1.00			1.00	
Incremental Delay, d2	8.9	1.2		6.6	0.4			20.7			0.0	
Delay (s)	18.1	13.7		15.1	10.5			70.2			38.6	
Level of Service	B	B		B	B			E			D	
Approach Delay (s/veh)		13.9			10.5			70.2			38.6	
Approach LOS		B			B			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	17.8	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.77				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	92.9%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3105	921	20	0	54
Future Volume (vph)	0	3105	921	20	0	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	*0.80	*0.80	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	4520	3014	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	4520	3014	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3375	1001	22	0	59
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3375	1001	22	0	59
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
* User Entered Value			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3105	921	20	0	54
Future Volume (Veh/h)	0	3105	921	20	0	54
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3375	1001	22	0	59
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.87				0.39	0.87
vC, conflicting volume	1023				2126	501
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	728				0	128
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	92
cM capacity (veh/h)	758				398	782

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	1125	1125	1125	501	501	22	59
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	22	59
cSH	1700	1700	1700	1700	1700	1700	782
Volume to Capacity	0.66	0.66	0.66	0.29	0.29	0.01	0.08
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Lane LOS							A
Approach Delay (s/veh)	0.0			0.0			10.0
Approach LOS							A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	63.3%	ICU Level of Service		B
Analysis Period (min)	15			

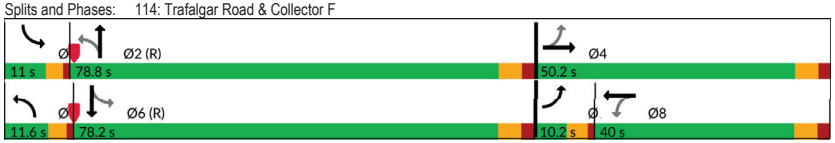
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	58	106	108	68	166	59	2127	130	128	1394	54
Future Volume (vph)	114	58	106	108	68	166	59	2127	130	128	1394	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.903			0.894			0.991			0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1626	0	1652	1610	0	1711	4381	0	1711	4394	0
Flt Permitted	0.176			0.645			0.093			0.048		
Satd. Flow (perm)	306	1626	0	1121	1610	0	167	4381	0	86	4394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		69			83			9			5	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	124	63	115	117	74	180	64	2312	141	139	1515	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	124	178	0	117	254	0	64	2453	0	139	1574	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0		40.0	40.0		11.5	26.0		11.0	26.0	
Total Split (s)	10.2	50.2		40.0	40.0		11.6	78.8		11.0	78.2	
Total Split (%)	7.3%	35.9%		28.6%	28.6%		8.3%	56.3%		7.9%	55.9%	
Maximum Green (s)	5.7	44.2		34.0	34.0		7.6	72.8		7.0	72.2	
Yellow Time (s)	3.5	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead			Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes			Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)		27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0		0	0			0			0	
Act Effct Green (s)	32.7	31.2		21.0	21.0		88.6	78.9		98.2	87.3	
Actuated g/C Ratio	0.23	0.22		0.15	0.15		0.63	0.56		0.70	0.62	
v/c Ratio	0.98	0.43		0.70	0.82		0.34	0.99		0.63	0.57	
Control Delay (s/veh)	124.4	29.8		76.6	58.0		12.0	51.0		45.0	18.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	124.4	29.8		76.6	58.0		12.0	51.0		45.0	18.7	
LOS	F	C		E	E		B	D		D	B	
Approach Delay (s/veh)		68.7			63.9			50.0			20.9	
Approach LOS		E			E			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay (s/veh): 42.0		Intersection LOS: D	
Intersection Capacity Utilization 88.3%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	124	178	117	254	64	2453	139	1574
v/c Ratio	0.98	0.43	0.70	0.82	0.34	0.99	0.63	0.57
Control Delay (s/veh)	124.4	29.8	76.6	58.0	12.0	51.0	45.0	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	124.4	29.8	76.6	58.0	12.0	51.0	45.0	18.7
Queue Length 50th (m)	29.1	25.9	31.7	48.0	7.6	~309.2	25.9	96.3
Queue Length 95th (m)	#60.1	44.6	49.6	73.9	m9.0	m262.3	#56.6	112.2
Internal Link Dist (m)		200.2		176.3		308.8		241.5
Turn Bay Length (m)	60.0		50.0		50.0		70.0	
Base Capacity (vph)	126	560	272	453	194	2471	222	2742
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.32	0.43	0.56	0.33	0.99	0.63	0.57

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	58	106	108	68	166	59	2127	130	128	1394	54
Future Volume (vph)	114	58	106	108	68	166	59	2127	130	128	1394	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.90		1.00	0.89		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1626		1652	1609		1711	4383		1711	4396	
Flt Permitted	0.18	1.00		0.64	1.00		0.09	1.00		0.05	1.00	
Satd. Flow (perm)	306	1626		1121	1609		168	4383		87	4396	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	124	63	115	117	74	180	64	2312	141	139	1515	59
RTOR Reduction (vph)	0	54	0	0	71	0	0	4	0	0	2	0
Lane Group Flow (vph)	124	124	0	117	183	0	64	2449	0	139	1572	0
Turn Type	pm+pt	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	31.2	31.2		21.0	21.0		85.1	78.8		96.8	86.5	
Effective Green, g (s)	31.2	31.2		21.0	21.0		85.1	78.8		96.8	86.5	
Actuated g/C Ratio	0.22	0.22		0.15	0.15		0.61	0.56		0.69	0.62	
Clearance Time (s)	4.5	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	122	362		168	241		171	2467		222	2716	
v/s Ratio Prot	c0.04	0.08			0.11		0.02	c0.56		c0.06	0.36	
v/s Ratio Perm	c0.18			0.10			0.21			0.37		
v/c Ratio	1.02	0.34		0.70	0.76		0.37	0.99		0.63	0.58	
Uniform Delay, d1	52.7	45.8		56.5	57.1		12.6	30.3		41.6	15.9	
Progression Factor	1.00	1.00		1.00	1.00		1.40	1.62		1.14	1.04	
Incremental Delay, d2	85.9	0.6		11.9	13.2		0.1	4.0		4.9	0.8	
Delay (s)	138.7	46.2		68.3	70.3		17.8	53.2		52.3	17.4	
Level of Service	F	D		E	E		B	D		D	B	
Approach Delay (s/veh)		84.2			69.7			52.3			20.2	
Approach LOS		F			E			D			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	44.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

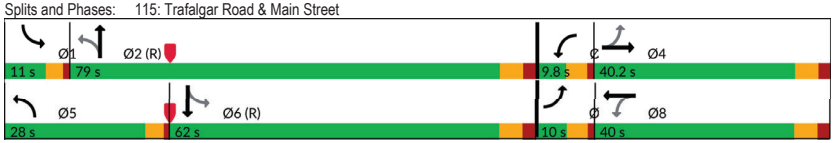
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	67	348	63	114	48	330	2072	191	111	1419	176
Future Volume (vph)	102	67	348	63	114	48	330	2072	191	111	1419	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.874			0.956			0.987			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3128	0	1789	3421	0	1711	4363	0	1711	4346	0
Flt Permitted	0.554			0.308			0.055			0.056		
Satd. Flow (perm)	1043	3128	0	580	3421	0	99	4363	0	101	4346	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		310			43			14			15	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	103	68	352	64	115	48	333	2093	193	112	1433	178
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	420	0	64	163	0	333	2286	0	112	1611	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0		9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	10.0	40.2		9.8	40.0		28.0	79.0		11.0	62.0	
Total Split (%)	7.1%	28.7%		7.0%	28.6%		20.0%	56.4%		7.9%	44.3%	
Maximum Green (s)	5.5	34.2		5.3	34.0		24.0	73.0		7.0	56.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		27.0			27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	20.7	14.8		19.1	12.2		107.4	90.0		85.3	71.9	
Actuated g/C Ratio	0.15	0.11		0.14	0.09		0.77	0.64		0.61	0.51	
v/c Ratio	0.55	0.69		0.51	0.49		0.80	0.81		0.59	0.72	
Control Delay (s/veh)	64.1	22.8		64.3	49.0		25.2	38.1		48.4	27.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	64.1	22.8		64.3	49.0		25.2	38.1		48.4	27.7	
LOS	E	C		E	D		C	D		D	C	
Approach Delay (s/veh)		30.9			53.3			36.5			29.0	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 34.1		Intersection LOS: C	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	103	420	64	163	333	2286	112	1611
v/c Ratio	0.55	0.69	0.51	0.49	0.80	0.81	0.59	0.72
Control Delay (s/veh)	64.1	22.8	64.3	49.0	25.2	38.1	48.4	27.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.1	22.8	64.3	49.0	25.2	38.1	48.4	27.7
Queue Length 50th (m)	26.3	15.8	16.0	17.3	66.9	238.2	10.6	138.0
Queue Length 95th (m)	42.2	32.6	28.6	27.9	m77.0	m235.0	38.8	189.7
Internal Link Dist (m)		882.8		603.0		688.8		212.3
Turn Bay Length (m)	60.0		90.0		50.0		50.0	
Base Capacity (vph)	186	998	126	863	419	2811	191	2240
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.42	0.51	0.19	0.79	0.81	0.59	0.72

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	67	348	63	114	48	330	2072	191	111	1419	176
Future Volume (vph)	102	67	348	63	114	48	330	2072	191	111	1419	176
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.87		1.00	0.96		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3129		1789	3420		1711	4365		1711	4348	
Flt Permitted	0.55	1.00		0.31	1.00		0.05	1.00		0.06	1.00	
Satd. Flow (perm)	1044	3129		580	3420		98	4365		101	4348	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	103	68	352	64	115	48	333	2093	193	112	1433	178
RTOR Reduction (vph)	0	277	0	0	39	0	0	5	0	0	7	0
Lane Group Flow (vph)	103	143	0	64	124	0	333	2281	0	112	1604	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.8	14.8		17.2	13.0		104.5	89.2		82.4	71.1	
Effective Green, g (s)	20.8	14.8		17.2	13.0		104.5	89.2		82.4	71.1	
Actuated g/C Ratio	0.15	0.11		0.12	0.09		0.75	0.64		0.59	0.51	
Clearance Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	187	330		107	317		411	2781		189	2208	
v/s Ratio Prot	c0.02	0.05		0.02	0.04		c0.17	c0.52		0.05	0.37	
v/s Ratio Perm	c0.06			0.06			0.43			0.30		
v/c Ratio	0.55	0.43		0.60	0.39		0.81	0.82		0.59	0.73	
Uniform Delay, d1	54.3	58.7		56.8	59.8		41.9	19.3		25.0	26.9	
Progression Factor	1.00	1.00		1.00	1.00		0.56	1.91		1.22	0.94	
Incremental Delay, d2	3.5	0.9		8.7	0.8		3.0	0.7		4.7	2.0	
Delay (s)	57.7	59.6		65.5	60.6		26.3	37.5		35.0	27.3	
Level of Service	E	E		E	E		C	D		D	C	
Approach Delay (s/veh)		59.2			62.0			36.1			27.8	
Approach LOS		E			E			D			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	36.8	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5	
Intersection Capacity Utilization	84.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

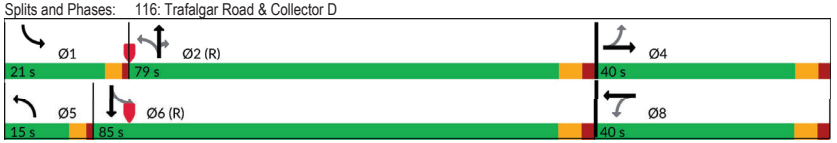
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	246	13	243	59	9	92	109	2186	151	247	1270	108
Future Volume (vph)	246	13	243	59	9	92	109	2186	151	247	1270	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.858			0.864				0.850		0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1545	0	1652	1556	0	1711	4421	1566	1711	4368	0
Flt Permitted	0.667			0.351			0.102			0.052		
Satd. Flow (perm)	1160	1545	0	610	1556	0	184	4421	1566	94	4368	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		175			100				86		14	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	14	264	64	10	100	118	2376	164	268	1380	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	267	278	0	64	110	0	118	2376	164	268	1497	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		15.0	79.0	79.0	21.0	85.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		10.7%	56.4%	56.4%	15.0%	60.7%	
Maximum Green (s)	34.0	34.0		34.0	34.0		11.0	73.0	73.0	17.0	79.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	33.4	33.4		33.4	33.4		83.9	73.0	73.0	96.6	81.7	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.60	0.52	0.52	0.69	0.58	
v/c Ratio	0.97	0.55		0.44	0.25		0.57	1.03	0.19	1.00	0.59	
Control Delay (s/veh)	98.9	21.3		56.1	10.9		26.0	47.5	4.0	100.0	15.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	6.2	0.0	0.0	0.0	
Total Delay (s/veh)	98.9	21.3		56.1	10.9		26.0	53.6	4.0	100.0	15.8	
LOS	F	C		E	B		C	D	A	F	B	
Approach Delay (s/veh)		59.3			27.5			49.3			28.5	
Approach LOS		E			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay (s/veh): 42.5		Intersection LOS: D	
Intersection Capacity Utilization 98.3%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	267	278	64	110	118	2376	164	268	1497
v/c Ratio	0.97	0.55	0.44	0.25	0.57	1.03	0.19	1.00	0.59
Control Delay (s/veh)	98.9	21.3	56.1	10.9	26.0	47.5	4.0	100.0	15.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0
Total Delay (s/veh)	98.9	21.3	56.1	10.9	26.0	53.6	4.0	100.0	15.8
Queue Length 50th (m)	74.4	24.2	15.4	2.2	4.6	~293.3	7.6	~70.1	54.5
Queue Length 95th (m)	#129.7	53.7	31.4	17.4	m14.3	#325.8	m4.3	#124.6	101.7
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	281	507	148	453	233	2305	857	267	2555
Starvation Cap Reductn	0	0	0	0	0	36	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.55	0.43	0.24	0.51	1.05	0.19	1.00	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	246	13	243	59	9	92	109	2186	151	247	1270	108
Future Volume (vph)	246	13	243	59	9	92	109	2186	151	247	1270	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.86		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1544		1652	1555		1711	4421	1566	1711	4369	
Flt Permitted	0.67	1.00		0.35	1.00		0.10	1.00	1.00	0.05	1.00	
Satd. Flow (perm)	1159	1544		611	1555		183	4421	1566	94	4369	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	14	264	64	10	100	118	2376	164	268	1380	117
RTOR Reduction (vph)	0	133	0	0	76	0	0	0	41	0	6	0
Lane Group Flow (vph)	267	145	0	64	34	0	118	2376	123	268	1491	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	33.4	33.4		33.4	33.4		81.9	73.0	73.0	94.6	81.7	
Effective Green, g (s)	33.4	33.4		33.4	33.4		81.9	73.0	73.0	94.6	81.7	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.59	0.52	0.52	0.68	0.58	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	276	368		145	370		204	2305	816	266	2549	
v/s Ratio Prot		0.09			0.02		0.04	0.54		c0.13	0.34	
v/s Ratio Perm	c0.23			0.10			0.30		0.08	c0.56		
v/c Ratio	0.97	0.39		0.44	0.09		0.58	1.03	0.15	1.01	0.59	
Uniform Delay, d1	52.8	44.8		45.4	41.5		14.8	33.5	17.4	50.3	18.4	
Progression Factor	1.00	1.00		1.00	1.00		1.59	0.69	0.44	1.27	0.80	
Incremental Delay, d2	44.7	0.7		2.1	0.1		2.5	23.6	0.2	49.7	0.7	
Delay (s)	97.5	45.5		47.5	41.6		26.0	46.7	7.8	113.8	15.6	
Level of Service	F	D		D	D		C	D	A	F	B	
Approach Delay (s/veh)		71.0			43.8			43.4			30.5	
Approach LOS		E			D			D			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	98.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

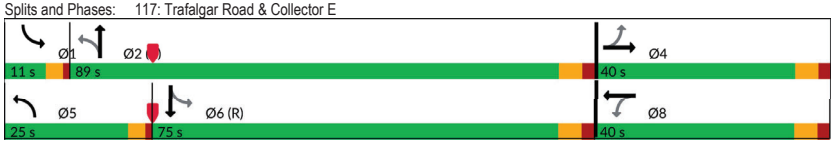
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	4	23	54	5	57	12	2344	51	68	1499	5
Future Volume (vph)	45	4	23	54	5	57	12	2344	51	68	1499	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.871			0.861			0.997				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1640	0	1789	1622	0	1711	4408	0	1711	4421	0
Flt Permitted	0.713			0.738			0.102			0.037		
Satd. Flow (perm)	1343	1640	0	1390	1622	0	184	4408	0	67	4421	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			62			3				
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	4	25	59	5	62	13	2548	55	74	1629	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	29	0	59	67	0	13	2603	0	74	1634	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	12.2	12.2		12.2	12.2		112.9	105.7		117.5	111.6	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.81	0.76		0.84	0.80	
v/c Ratio	0.42	0.18		0.49	0.34		0.06	0.78		0.48	0.46	
Control Delay (s/veh)	71.0	25.2		74.3	20.0		3.6	13.5		31.8	7.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.4		0.0	0.0	
Total Delay (s/veh)	71.0	25.2		74.3	20.0		3.6	13.8		31.8	7.5	
LOS	E	C		E	C		A	B		C	A	
Approach Delay (s/veh)		54.0			45.4			13.8			8.6	
Approach LOS		D			D			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 75.2%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	49	29	59	67	13	2603	74	1634
v/c Ratio	0.42	0.18	0.49	0.34	0.06	0.78	0.48	0.46
Control Delay (s/veh)	71.0	25.2	74.3	20.0	3.6	13.5	31.8	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay (s/veh)	71.0	25.2	74.3	20.0	3.6	13.8	31.8	7.5
Queue Length 50th (m)	13.4	1.1	16.1	1.4	0.7	103.7	9.7	45.2
Queue Length 95th (m)	26.1	10.9	m29.1	m15.0	m0.9	m116.7	m24.5	74.8
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	326	417	337	440	383	3329	153	3524
Starvation Cap Reductn	0	0	0	0	0	45	0	145
Spillback Cap Reductn	0	0	0	2	0	250	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.07	0.18	0.15	0.03	0.85	0.48	0.48

Intersection Summary

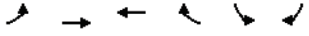
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	4	23	54	5	57	12	2344	51	68	1499	5
Future Volume (vph)	45	4	23	54	5	57	12	2344	51	68	1499	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.87		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1640		1789	1622		1711	4407		1711	4419	
Flt Permitted	0.71	1.00		0.74	1.00		0.10	1.00		0.04	1.00	
Satd. Flow (perm)	1344	1640		1391	1622		183	4407		66	4419	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	4	25	59	5	62	13	2548	55	74	1629	5
RTOR Reduction (vph)	0	23	0	0	57	0	0	1	0	0	0	0
Lane Group Flow (vph)	49	6	0	59	10	0	13	2602	0	74	1634	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.2	12.2		12.2	12.2		107.5	104.9		115.8	109.2	
Effective Green, g (s)	12.2	12.2		12.2	12.2		107.5	104.9		115.8	109.2	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.77	0.75		0.83	0.78	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	117	142		121	141		168	3302		135	3446	
v/s Ratio Prot		0.00			0.01		0.00	c0.59		c0.03	0.37	
v/s Ratio Perm	0.04			c0.04			0.06			0.42		
v/c Ratio	0.42	0.04		0.49	0.07		0.08	0.79		0.55	0.47	
Uniform Delay, d1	60.5	58.6		60.9	58.7		4.1	10.7		26.6	5.4	
Progression Factor	1.00	1.00		1.00	1.00		1.45	1.09		1.24	1.34	
Incremental Delay, d2	2.4	0.1		3.1	0.2		0.1	0.6		3.7	0.4	
Delay (s)	63.0	58.7		64.2	58.9		6.0	12.3		36.6	7.6	
Level of Service	E	E		E	E		A	B		D	A	
Approach Delay (s/veh)		61.4			61.4			12.3			8.9	
Approach LOS		E			E			B			A	

Intersection Summary

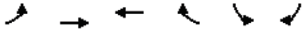
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	21	438	334	286	79	5
Future Volume (vph)	21	438	334	286	79	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.931		0.993	
Flt Protected		0.998			0.955	
Satd. Flow (prot)	0	3414	3185	0	1708	0
Flt Permitted		0.998			0.955	
Satd. Flow (perm)	0	3414	3185	0	1708	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	476	363	311	86	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	499	674	0	91	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	39.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	438	334	286	79	5
Future Volume (Veh/h)	21	438	334	286	79	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	23	476	363	311	86	5
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	674				803	337
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	674				803	337
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				73	99
cM capacity (veh/h)	913				313	659

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	182	317	242	432	91
Volume Left	23	0	0	0	86
Volume Right	0	0	0	311	5
cSH	913	1700	1700	1700	322
Volume to Capacity	0.03	0.19	0.14	0.25	0.28
Queue Length 95th (m)	0.6	0.0	0.0	0.0	8.6
Control Delay (s/veh)	1.4	0.0	0.0	0.0	20.5
Lane LOS	A				C
Approach Delay (s/veh)	0.5		0.0		20.5
Approach LOS					C

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	39.0%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	192	177	160	0	0	65
Future Volume (vph)	192	177	160	0	0	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.975				
Satd. Flow (prot)	0	3489	3579	0	1629	0
Flt Permitted		0.975				
Satd. Flow (perm)	0	3489	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	192	177	160	0	0	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	369	160	0	65	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	29.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	192	177	160	0	0	65
Future Volume (Veh/h)	192	177	160	0	0	65
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	192	177	160	0	0	65
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	160				633	80
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	160				633	80
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	86				100	93
cM capacity (veh/h)	1417				356	964

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	251	118	107	53	65
Volume Left	192	0	0	0	0
Volume Right	0	0	0	0	65
cSH	1417	1700	1700	1700	964
Volume to Capacity	0.14	0.07	0.06	0.03	0.07
Queue Length 95th (m)	3.6	0.0	0.0	0.0	1.6
Control Delay (s/veh)	6.3	0.0	0.0	0.0	9.0
Lane LOS	A				A
Approach Delay (s/veh)	4.3		0.0		9.0
Approach LOS					A

Intersection Summary				
Average Delay		3.7		
Intersection Capacity Utilization		29.1%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	177	0	0	0	0	160
Future Volume (vph)	177	0	0	0	0	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			80.2	161.7	
Travel Time (s)	55.9			6.0	12.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	192	0	0	0	0	174
Shared Lane Traffic (%)						
Lane Group Flow (vph)	192	0	0	0	0	174
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	177	0	0	0	0	160
Future Volume (vph)	177	0	0	0	0	160
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	192	0	0	0	0	174

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	192	0	174
Volume Left (vph)	192	0	0
Volume Right (vph)	0	0	174
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	5.4	4.9	3.9
Degree Utilization, x	0.29	0.00	0.19
Capacity (veh/h)	640	733	881
Control Delay (s/veh)	9.4	6.7	7.8
Approach Delay (s/veh)	9.4		7.8
Approach LOS	A		A

Intersection Summary			
Delay	8.6		
Level of Service	A		
Intersection Capacity Utilization	13.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	11	32	0	0	0
Future Volume (vph)	0	11	32	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	12	35	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	0	0	35	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	11	32	0	0	0
Future Volume (Veh/h)	0	11	32	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	12	35	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	70	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	70	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	98			
cM capacity (veh/h)	914	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	12	35	0
Volume Left	0	35	0
Volume Right	12	0	0
cSH	1085	1623	1700
Volume to Capacity	0.01	0.02	0.00
Queue Length 95th (m)	0.3	0.5	0.0
Control Delay (s/veh)	8.4	7.3	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	7.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	7.5		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

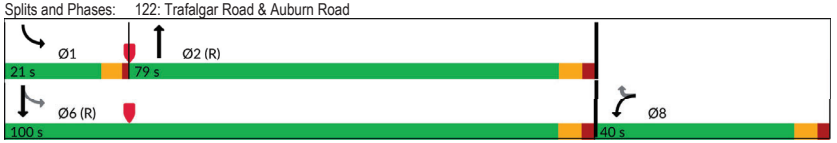
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	51	2014	110	117	1563
Future Volume (vph)	19	51	2014	110	117	1563
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.992			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4386	0	1711	4421
Flt Permitted	0.950				0.042	
Satd. Flow (perm)	1789	1601	4386	0	76	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		51	8			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	51	2014	110	117	1563
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	51	2124	0	117	1563
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		5.0	20.0
Minimum Split (s)	40.0	40.0	40.0		9.5	40.0
Total Split (s)	40.0	40.0	79.0		21.0	100.0
Total Split (%)	28.6%	28.6%	56.4%		15.0%	71.4%
Maximum Green (s)	34.0	34.0	73.0		16.5	94.0
Yellow Time (s)	4.0	4.0	4.0		3.5	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Don't Walk (s)	9.0	9.0	27.0			27.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	10.0	10.0	105.9		122.7	122.4
Actuated g/C Ratio	0.07	0.07	0.76		0.88	0.87
v/c Ratio	0.15	0.32	0.64		0.61	0.40
Control Delay (s/veh)	64.0	20.9	4.1		38.8	2.6
Queue Delay	0.0	0.0	0.1		0.0	0.0
Total Delay (s/veh)	64.0	20.9	4.2		38.8	2.6
LOS	E	C	A		D	A
Approach Delay (s/veh)	32.6		4.2			5.1
Approach LOS	C		A			A

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.64		
Intersection Signal Delay (s/veh): 5.1		Intersection LOS: A
Intersection Capacity Utilization 69.9%		ICU Level of Service C
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	19	51	2124	117	1563
v/c Ratio	0.15	0.32	0.64	0.61	0.40
Control Delay (s/veh)	64.0	20.9	4.1	38.8	2.6
Queue Delay	0.0	0.0	0.1	0.0	0.0
Total Delay (s/veh)	64.0	20.9	4.2	38.8	2.6
Queue Length 50th (m)	5.1	0.0	56.8	14.2	34.5
Queue Length 95th (m)	13.7	13.4	18.4	34.1	39.6
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	434	427	3320	259	3865
Starvation Cap Reductn	0	0	166	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.04	0.12	0.67	0.45	0.40

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	51	2014	110	117	1563
Future Volume (vph)	19	51	2014	110	117	1563
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		4.5	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4387		1711	4421
Flt Permitted	0.95	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1789	1601	4387		76	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	51	2014	110	117	1563
RTOR Reduction (vph)	0	48	2	0	0	0
Lane Group Flow (vph)	19	3	2122	0	117	1563
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	8.0	8.0	104.7		120.0	120.0
Effective Green, g (s)	8.0	8.0	104.7		120.0	120.0
Actuated g/C Ratio	0.06	0.06	0.75		0.86	0.86
Clearance Time (s)	6.0	6.0	6.0		4.5	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	102	91	3280		191	3789
v/s Ratio Prot	c0.01		c0.48		c0.05	0.35
v/s Ratio Perm		0.00			0.48	
v/c Ratio	0.19	0.03	0.65		0.61	0.41
Uniform Delay, d1	62.9	62.3	8.6		31.0	2.2
Progression Factor	1.00	1.00	0.38		1.00	1.00
Incremental Delay, d2	0.9	0.1	0.6		5.7	0.3
Delay (s)	63.8	62.5	3.9		36.8	2.5
Level of Service	E	E	A		D	A
Approach Delay (s/veh)	62.8		3.9			4.9
Approach LOS	E		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	5.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	11	32	32	11	0
Future Volume (vph)	0	11	32	32	11	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.976		
Satd. Flow (prot)	1629	0	0	1838	1883	0
Flt Permitted				0.976		
Satd. Flow (perm)	1629	0	0	1838	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	11	32	32	11	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	0	0	64	11	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	11	32	32	11	0
Future Volume (Veh/h)	0	11	32	32	11	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	11	32	32	11	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	107	11	11			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	107	11	11			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	98			
cM capacity (veh/h)	873	1070	1608			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	11	64	11
Volume Left	0	32	0
Volume Right	11	0	0
cSH	1070	1608	1700
Volume to Capacity	0.01	0.02	0.00*
Queue Length 95th (m)	0.2	0.5	0.0
Control Delay (s/veh)	8.4	3.7	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	3.7	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization		20.1%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	47	50	30	57	62	77
Future Volume (vph)	47	50	30	57	62	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.931		0.912			
Flt Protected	0.976					0.978
Satd. Flow (prot)	1636	0	1642	0	0	1761
Flt Permitted	0.976					0.978
Satd. Flow (perm)	1636	0	1642	0	0	1761
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	54	33	62	67	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	105	0	95	0	0	151
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	47	50	30	57	62	77
Future Volume (Veh/h)	47	50	30	57	62	77
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	51	54	33	62	67	84
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	282	64			95	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	282	64			95	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	95			96	
cM capacity (veh/h)	676	1000			1499	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	105	95	151
Volume Left	51	0	67
Volume Right	54	62	0
cSH	812	1700	1499
Volume to Capacity	0.13	0.06	0.04
Queue Length 95th (m)	3.4	0.0	1.1
Control Delay (s/veh)	10.1	0.0	3.5
Lane LOS	B		A
Approach Delay (s/veh)	10.1	0.0	3.5
Approach LOS	B		

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	174	9	51	127	0	11	12	32	117	6	0
Future Volume (vph)	0	174	9	51	127	0	11	12	32	117	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993						0.921				
Flt Protected					0.986			0.990			0.955	
Satd. Flow (prot)	0	1870	0	0	1775	0	0	1717	0	0	1799	0
Flt Permitted					0.986			0.990			0.955	
Satd. Flow (perm)	0	1870	0	0	1775	0	0	1717	0	0	1799	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	189	10	55	138	0	12	13	35	127	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	199	0	0	193	0	0	60	0	0	134	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	174	9	51	127	0	11	12	32	117	6	0
Future Volume (Veh/h)	0	174	9	51	127	0	11	12	32	117	6	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	189	10	55	138	0	12	13	35	127	7	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	138			199			446	442	194	484	447	138
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	138			199			446	442	194	484	447	138
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			98	97	96	72	99	100
cM capacity (veh/h)	1446			1373			501	489	847	449	486	910

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	199	193	60	134
Volume Left	0	55	12	127
Volume Right	10	0	35	0
cSH	1446	1373	654	451
Volume to Capacity	0.00	0.04	0.09	0.30
Queue Length 95th (m)	0.0	1.0	2.3	9.3
Control Delay (s/veh)	0.0	2.4	11.1	16.3
Lane LOS		A	B	C
Approach Delay (s/veh)	0.0	2.4	11.1	16.3
Approach LOS			B	C

Intersection Summary				
Average Delay		5.7		
Intersection Capacity Utilization		42.7%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	235	46	12	99	32	34
Future Volume (vph)	235	46	12	99	32	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.978				0.931	
Flt Protected				0.995	0.976	
Satd. Flow (prot)	1842	0	0	1874	1711	0
Flt Permitted				0.995	0.976	
Satd. Flow (perm)	1842	0	0	1874	1711	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	255	50	13	108	35	37
Shared Lane Traffic (%)						
Lane Group Flow (vph)	305	0	0	121	72	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.8%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	2	85	11	0	124
Future Volume (vph)	19	2	85	11	0	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988		0.984			
Flt Protected	0.956					
Satd. Flow (prot)	1642	0	1772	0	0	1801
Flt Permitted	0.956					
Satd. Flow (perm)	1642	0	1772	0	0	1801
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	2	92	12	0	135
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	104	0	0	135
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	2	85	11	0	124
Future Volume (Veh/h)	19	2	85	11	0	124
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	2	92	12	0	135
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	233	98			104	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	233	98			104	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			100	
cM capacity (veh/h)	755	958			1488	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	23	104	135
Volume Left	21	0	0
Volume Right	2	12	0
cSH	769	1700	1488
Volume to Capacity	0.03	0.06	0.00
Queue Length 95th (m)	0.7	0.0	0.0
Control Delay (s/veh)	9.8	0.0	0.0
Lane LOS	A		
Approach Delay (s/veh)	9.8	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	16.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	45	4	4	15	8	3	47	2	2	64	0
Future Volume (vph)	0	45	4	4	15	8	3	47	2	2	64	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.990			0.958			0.995				
Flt Protected					0.993			0.997			0.999	
Satd. Flow (prot)	0	1721	0	0	1654	0	0	1786	0	0	1799	0
Flt Permitted					0.993			0.997			0.999	
Satd. Flow (perm)	0	1721	0	0	1654	0	0	1786	0	0	1799	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	49	4	4	16	9	3	51	2	2	70	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	0	0	29	0	0	56	0	0	72	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	45	4	4	15	8	3	47	2	2	64	0
Future Volume (Veh/h)	0	45	4	4	15	8	3	47	2	2	64	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	49	4	4	16	9	3	51	2	2	70	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	149	133	70	161	132	52	70			53		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	149	133	70	161	132	52	70			53		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	94	100	99	98	99	100			100		
cM capacity (veh/h)	797	755	993	760	756	1016	1531			1553		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	53	29	56	72
Volume Left	0	4	3	2
Volume Right	4	9	2	0
cSH	769	822	1531	1553
Volume to Capacity	0.07	0.04	0.00*	0.00*
Queue Length 95th (m)	1.7	0.8	0.0	0.0
Control Delay (s/veh)	10.0	9.5	0.4	0.2
Lane LOS	B	A	A	A
Approach Delay (s/veh)	10.0	9.5	0.4	0.2
Approach LOS	B	A		

Intersection Summary				
Average Delay		4.0		
Intersection Capacity Utilization		15.5%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	76	14	0	17	0	27	97	22	0	62	4
Future Volume (vph)	2	76	14	0	17	0	27	97	22	0	62	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.980						0.979			0.992	
Flt Protected		0.999						0.991				
Satd. Flow (prot)	0	1844	0	0	1883	0	0	1747	0	0	1786	0
Flt Permitted		0.999						0.991				
Satd. Flow (perm)	0	1844	0	0	1883	0	0	1747	0	0	1786	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	83	15	0	18	0	29	105	24	0	67	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	100	0	0	18	0	0	158	0	0	71	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	76	14	0	17	0	27	97	22	0	62	4
Future Volume (Veh/h)	2	76	14	0	17	0	27	97	22	0	62	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	83	15	0	18	0	29	105	24	0	67	4
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	253	256	69	301	246	117	71			129		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253	256	69	301	246	117	71			129		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	87	98	100	97	100	98			100		
cM capacity (veh/h)	675	636	994	570	644	935	1529			1457		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	100	18	158	71
Volume Left	2	0	29	0
Volume Right	15	0	24	4
cSH	673	644	1529	1457
Volume to Capacity	0.15	0.03	0.02	0.00
Queue Length 95th (m)	4.0	0.7	0.4	0.0
Control Delay (s/veh)	11.3	10.8	1.5	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	11.3	10.8	1.5	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay		4.5		
Intersection Capacity Utilization		27.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	123	13	9	121	4	15	25	8	1	63	79
Future Volume (vph)	67	123	13	9	121	4	15	25	8	1	63	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.996			0.977			0.925	
Flt Protected		0.984			0.997			0.985				
Satd. Flow (prot)	0	1695	0	0	1788	0	0	1733	0	0	1666	0
Flt Permitted		0.984			0.997			0.985				
Satd. Flow (perm)	0	1695	0	0	1788	0	0	1733	0	0	1666	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	73	134	14	10	132	4	16	27	9	1	68	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	221	0	0	146	0	0	52	0	0	155	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	123	13	9	121	4	15	25	8	1	63	79
Future Volume (Veh/h)	67	123	13	9	121	4	15	25	8	1	63	79
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	73	134	14	10	132	4	16	27	9	1	68	86
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	247	181	111	258	220	32	154			36		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	247	181	111	258	220	32	154			36		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	81	99	98	80	100	99			100		
cM capacity (veh/h)	593	704	942	580	671	1043	1426			1575		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	221	146	52	155
Volume Left	73	10	16	1
Volume Right	14	4	9	86
cSH	673	670	1426	1575
Volume to Capacity	0.33	0.22	0.01	0.00*
Queue Length 95th (m)	10.9	6.3	0.3	0.0
Control Delay (s/veh)	12.9	11.9	2.4	0.1
Lane LOS	B	B	A	A
Approach Delay (s/veh)	12.9	11.9	2.4	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay		8.2		
Intersection Capacity Utilization		41.6%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	150	0	13	112	28	1	15	4	20	41	11
Future Volume (vph)	10	150	0	13	112	28	1	15	4	20	41	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.976			0.974			0.979	
Flt Protected		0.997			0.996			0.998			0.986	
Satd. Flow (prot)	0	1795	0	0	1750	0	0	1750	0	0	1738	0
Flt Permitted		0.997			0.996			0.998			0.986	
Satd. Flow (perm)	0	1795	0	0	1750	0	0	1750	0	0	1738	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	163	0	14	122	30	1	16	4	22	45	12
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	174	0	0	166	0	0	21	0	0	79	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	150	0	13	112	28	1	15	4	20	41	11
Future Volume (Veh/h)	10	150	0	13	112	28	1	15	4	20	41	11
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	163	0	14	122	30	1	16	4	22	45	12
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	152			163			385	365	163	362	350	137
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	152			163			385	365	163	362	350	137
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	97	100	96	92	99
cM capacity (veh/h)	1429			1416			525	553	882	570	564	911

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	174	166	21	79
Volume Left	11	14	1	22
Volume Right	0	30	4	12
cSH	1429	1416	594	601
Volume to Capacity	0.00*	0.00*	0.04	0.13
Queue Length 95th (m)	0.2	0.2	0.8	3.4
Control Delay (s/veh)	0.5	0.7	11.3	11.9
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.5	0.7	11.3	11.9
Approach LOS			B	B

Intersection Summary				
Average Delay		3.2		
Intersection Capacity Utilization		28.9%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	88	59	21	104	29	36
Future Volume (vph)	88	59	21	104	29	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.946				0.926	
Flt Protected	0.971			0.992		
Satd. Flow (prot)	1654	0	0	1786	1667	0
Flt Permitted	0.971			0.992		
Satd. Flow (perm)	1654	0	0	1786	1667	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	96	64	23	113	32	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	160	0	0	136	71	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	88	59	21	104	29	36
Future Volume (Veh/h)	88	59	21	104	29	36
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	96	64	23	113	32	39
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	211	52	71			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	211	52	71			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	94	98			
cM capacity (veh/h)	766	1016	1529			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	160	136	71
Volume Left	96	23	0
Volume Right	64	0	39
cSH	850	1529	1700
Volume to Capacity	0.19	0.02	0.04
Queue Length 95th (m)	5.2	0.3	0.0
Control Delay (s/veh)	10.2	1.3	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	10.2	1.3	0.0
Approach LOS	B		

Intersection Summary				
Average Delay		5.0		
Intersection Capacity Utilization		28.5%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	7	40	24	14	0
Future Volume (vph)	0	7	40	24	14	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.970		
Satd. Flow (prot)	1629	0	0	1827	1883	0
Flt Permitted				0.970		
Satd. Flow (perm)	1629	0	0	1827	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	278.5	
Travel Time (s)	16.7			24.3	14.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	8	43	26	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	69	15	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	7	40	24	14	0
Future Volume (Veh/h)	0	7	40	24	14	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	8	43	26	15	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	127	15	15			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	127	15	15			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	97			
cM capacity (veh/h)	844	1065	1603			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	8	69	15
Volume Left	0	43	0
Volume Right	8	0	0
cSH	1065	1603	1700
Volume to Capacity	0.00*	0.03	0.00*
Queue Length 95th (m)	0.2	0.6	0.0
Control Delay (s/veh)	8.4	4.6	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	4.6	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.2		
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	9	123	0	8	9	3
Future Volume (vph)	9	123	0	8	9	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.874				0.969	
Flt Protected					0.963	
Satd. Flow (prot)	1574	0	0	1801	1680	0
Flt Permitted					0.963	
Satd. Flow (perm)	1574	0	0	1801	1680	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	134	0	9	10	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	144	0	0	9	13	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	9	123	0	8	9	3
Future Volume (Veh/h)	9	123	0	8	9	3
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	134	0	9	10	3
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	23	0	161	22	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	23	0	161	22	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	99	88	100	99	99	
cM capacity (veh/h)	865	1085	696	867	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	144	9	13
Volume Left	0	0	10
Volume Right	134	0	3
cSH	1066	867	1623
Volume to Capacity	0.14	0.01	0.00*
Queue Length 95th (m)	3.5	0.2	0.1
Control Delay (s/veh)	8.9	9.2	5.6
Lane LOS	A	A	A
Approach Delay (s/veh)	8.9	9.2	5.6
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.7		
Intersection Capacity Utilization	18.1%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

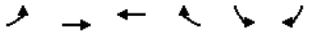
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	70	30	50	69	1
Future Volume (vph)	1	70	30	50	69	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.867				0.998	
Flt Protected	0.999			0.981		
Satd. Flow (prot)	1506	0	0	1766	1797	0
Flt Permitted	0.999			0.981		
Satd. Flow (perm)	1506	0	0	1766	1797	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	76	33	54	75	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	77	0	0	87	76	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	70	30	50	69	1
Future Volume (Veh/h)	1	70	30	50	69	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	76	33	54	75	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	196	76	76			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	196	76	76			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	98			
cM capacity (veh/h)	776	986	1523			

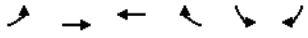
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	77	87	76
Volume Left	1	33	0
Volume Right	76	0	1
cSH	982	1523	1700
Volume to Capacity	0.08	0.02	0.04
Queue Length 95th (m)	1.9	0.5	0.0
Control Delay (s/veh)	9.0	2.9	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	9.0	2.9	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	22.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	27	332	142	84	170	52
Future Volume (vph)	27	332	142	84	170	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.950		0.968	
Flt Protected		0.996			0.963	
Satd. Flow (prot)	0	1793	1711	0	1621	0
Flt Permitted		0.996			0.963	
Satd. Flow (perm)	0	1793	1711	0	1621	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	361	154	91	185	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	390	245	0	242	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	332	142	84	170	52
Future Volume (Veh/h)	27	332	142	84	170	52
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	29	361	154	91	185	57
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.97				0.97	0.97
vC, conflicting volume	245				619	200
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	211				595	164
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				58	93
cM capacity (veh/h)	1324				445	857

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	390	245	242
Volume Left	29	0	185
Volume Right	0	91	57
cSH	1324	1700	502
Volume to Capacity	0.02	0.14	0.48
Queue Length 95th (m)	0.5	0.0	19.7
Control Delay (s/veh)	0.8	0.0	18.7
Lane LOS	A		C
Approach Delay (s/veh)	0.8	0.0	18.7
Approach LOS			C

Intersection Summary			
Average Delay	5.5		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	77	8	4	41	34	12
Future Volume (vph)	77	8	4	41	34	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.987				0.965	
Flt Protected				0.996	0.964	
Satd. Flow (prot)	1716	0	0	1732	1675	0
Flt Permitted				0.996	0.964	
Satd. Flow (perm)	1716	0	0	1732	1675	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	9	4	45	37	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	93	0	0	49	50	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	77	8	4	41	34	12
Future Volume (Veh/h)	77	8	4	41	34	12
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	84	9	4	45	37	13
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	87	0	132	81	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	87	0	132	81	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	89	99	99	94	98	
cM capacity (veh/h)	785	1085	752	791	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	93	49	50
Volume Left	0	4	37
Volume Right	9	0	13
cSH	806	788	1623
Volume to Capacity	0.12	0.06	0.02
Queue Length 95th (m)	3.0	1.5	0.5
Control Delay (s/veh)	10.0	9.9	5.4
Lane LOS	B	A	A
Approach Delay (s/veh)	10.0	9.9	5.4
Approach LOS	B	A	

Intersection Summary			
Average Delay	8.8		
Intersection Capacity Utilization	15.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	90	208	47	9	1	274	2	49	8	4	59
Future Volume (vph)	18	90	208	47	9	1	274	2	49	8	4	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.911			0.998			0.980			0.888	
Flt Protected		0.997			0.960			0.959			0.994	
Satd. Flow (prot)	0	1635	0	0	1725	0	0	1692	0	0	1589	0
Flt Permitted		0.997			0.960			0.959			0.994	
Satd. Flow (perm)	0	1635	0	0	1725	0	0	1692	0	0	1589	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	98	226	51	10	1	298	2	53	9	4	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	344	0	0	62	0	0	353	0	0	77	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	90	208	47	9	1	274	2	49	8	4	59
Future Volume (Veh/h)	18	90	208	47	9	1	274	2	49	8	4	59
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	98	226	51	10	1	298	2	53	9	4	64
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	11			324			430	364	211	418	477	11
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	11			314			420	354	200	408	468	11
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			96			38	100	94	98	99	94
cM capacity (veh/h)	1608			1236			483	536	834	492	463	1071

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	344	62	353	77
Volume Left	20	51	298	9
Volume Right	226	1	53	64
cSH	1608	1236	516	888
Volume to Capacity	0.01	0.04	0.68	0.09
Queue Length 95th (m)	0.3	1.0	39.4	2.2
Control Delay (s/veh)	0.5	6.7	25.8	9.4
Lane LOS	A	A	D	A
Approach Delay (s/veh)	0.5	6.7	25.8	9.4
Approach LOS			D	A

Intersection Summary					
Average Delay		12.5			
Intersection Capacity Utilization		53.1%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	6	2	46	83	2
Future Volume (vph)	2	6	2	46	83	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.895				0.997	
Flt Protected	0.989			0.998		
Satd. Flow (prot)	1539	0	0	1797	1795	0
Flt Permitted	0.989			0.998		
Satd. Flow (perm)	1539	0	0	1797	1795	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	7	2	50	90	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	0	0	52	92	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	6	2	46	83	2
Future Volume (Veh/h)	2	6	2	46	83	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	7	2	50	90	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	145	91	92			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	145	91	92			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	846	967	1503			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	9	52	92
Volume Left	2	2	0
Volume Right	7	0	2
cSH	937	1503	1700
Volume to Capacity	0.00*	0.00*	0.05
Queue Length 95th (m)	0.2	0.0	0.0
Control Delay (s/veh)	8.9	0.3	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.9	0.3	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		0.6		
Intersection Capacity Utilization		14.5%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	20	19	0	0	58	77	57	0	26	0
Future Volume (vph)	0	0	20	19	0	0	58	77	57	0	26	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.960				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	20	19	0	0	58	77	57	0	26	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	20	0	0	19	0	0	192	0	0	26	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	31.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	20	19	0	0	58	77	57	0	26	0
Future Volume (Veh/h)	0	0	20	19	0	0	58	77	57	0	26	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	20	19	0	0	58	77	57	0	26	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			20			61	48	10	144	58	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			20			61	48	10	144	58	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			94	91	95	100	97	100
cM capacity (veh/h)	1623			1596			904	834	1071	720	823	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	20	19	192	26
Volume Left	0	19	58	0
Volume Right	20	0	57	0
cSH	1623	1596	915	823
Volume to Capacity	0.00	0.01	0.21	0.03
Queue Length 95th (m)	0.0	0.3	6.0	0.7
Control Delay (s/veh)	0.0	7.3	10.0	9.5
Lane LOS		A	A	A
Approach Delay (s/veh)	0.0	7.3	10.0	9.5
Approach LOS			A	A

Intersection Summary				
Average Delay		9.0		
Intersection Capacity Utilization		31.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	7	20	64	21	0
Future Volume (vph)	0	7	20	64	21	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.988		
Satd. Flow (prot)	1629	0	0	1861	1883	0
Flt Permitted				0.988		
Satd. Flow (perm)	1629	0	0	1861	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			22.6	24.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	8	22	70	23	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	92	23	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		

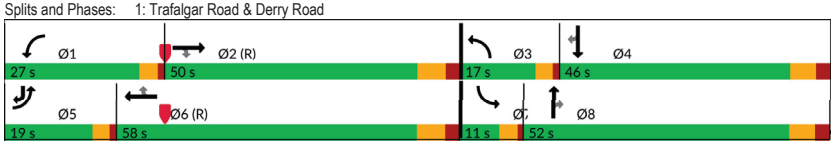
Intersection Sign configuration not allowed in HCM analysis.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
Future Volume (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			155			123			133			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
Shared Lane Traffic (%)												
Lane Group Flow (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	7.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	11.0
Total Split (s)	19.0	50.0	50.0	27.0	58.0	58.0	17.0	52.0	52.0	11.0	46.0	19.0
Total Split (%)	13.6%	35.7%	35.7%	19.3%	41.4%	41.4%	12.1%	37.1%	37.1%	7.9%	32.9%	13.6%
Maximum Green (s)	15.0	43.1	43.1	23.0	51.1	51.1	13.0	45.2	45.2	7.0	39.2	15.0
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	3.0
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	1.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	15.9	45.8	45.8	23.3	53.2	53.2	14.0	47.2	47.2	8.0	41.2	62.9
Actuated g/C Ratio	0.11	0.33	0.33	0.17	0.38	0.38	0.10	0.34	0.34	0.06	0.29	0.45
v/c Ratio	0.67	0.61	0.37	0.78	1.09	0.18	1.26	1.21	0.39	1.05	1.15	0.68
Control Delay (s/veh)	83.0	37.5	10.1	66.3	87.6	7.5	171.8	128.2	10.9	125.8	127.7	34.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.0	37.5	10.1	66.3	87.6	7.5	171.8	128.2	10.9	125.8	127.7	34.0
LOS	F	D	B	E	F	A	F	F	B	F	F	C
Approach Delay (s/veh)		41.3			79.8			123.5			104.7	
Approach LOS		D			E			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay (s/veh): 92.3		Intersection LOS: F	
Intersection Capacity Utilization 98.1%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
v/c Ratio	0.67	0.61	0.37	0.78	1.09	0.18	1.26	1.21	0.39	1.05	1.15	0.68
Control Delay (s/veh)	83.0	37.5	10.1	66.3	87.6	7.5	171.8	128.2	10.9	125.8	127.7	34.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	83.0	37.5	10.1	66.3	87.6	7.5	171.8	128.2	10.9	125.8	127.7	34.0
Queue Length 50th (m)	40.3	90.5	9.3	55.7	~252.7	4.2	~71.9	~258.2	30.3	~29.5	~201.0	98.1
Queue Length 95th (m)	55.3	108.2	22.3	87.0	#278.4	m9.5	m#85.1	m#278.9	m30.2	#55.1	#247.2	158.6
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	385	1465	618	601	1734	684	317	1434	616	183	1251	772
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.61	0.37	0.75	1.09	0.18	1.26	1.21	0.39	1.05	1.15	0.68

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
Future Volume (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1570	3506	4565	1601	3173	4254	1566	3204	4254	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	255	900	229	453	1894	120	399	1742	243	192	1444	528
RTOR Reduction (vph)	0	0	104	0	0	74	0	0	88	0	0	73
Lane Group Flow (vph)	255	900	125	453	1894	46	399	1742	155	192	1444	455
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	14.9	43.8	43.8	22.3	51.2	51.2	13.0	45.2	45.2	7.0	39.2	54.1
Effective Green, g (s)	15.9	45.8	45.8	23.3	53.2	53.2	14.0	47.2	47.2	8.0	41.2	58.1
Actuated g/C Ratio	0.11	0.33	0.33	0.17	0.38	0.38	0.10	0.34	0.34	0.06	0.29	0.42
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	4.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	382	1464	513	583	1734	608	317	1434	527	183	1251	649
v/s Ratio Prot	0.08	0.20		c0.13	c0.41		c0.13	c0.41		0.06	0.34	0.08
v/s Ratio Perm			0.08			0.03			0.10			0.21
v/c Ratio	0.67	0.61	0.24	0.78	1.09	0.08	1.26	1.21	0.29	1.05	1.15	0.70
Uniform Delay, d1	59.5	39.7	34.4	55.9	43.4	27.7	63.0	46.4	34.1	66.0	49.4	33.8
Progression Factor	1.25	0.89	0.70	1.05	0.93	1.62	0.86	0.63	0.64	0.86	1.19	1.30
Incremental Delay, d2	5.4	1.8	1.1	5.7	49.2	0.2	127.9	99.8	0.3	71.4	76.8	3.3
Delay (s)	79.6	37.1	25.0	64.2	89.6	45.1	182.0	128.8	22.2	128.3	135.6	47.2
Level of Service	E	D	C	E	F	D	F	F	C	F	F	D
Approach Delay (s/veh)		43.0			82.8			126.9			113.4	
Approach LOS		D			F			F			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	96.6	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.14			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	98.1%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

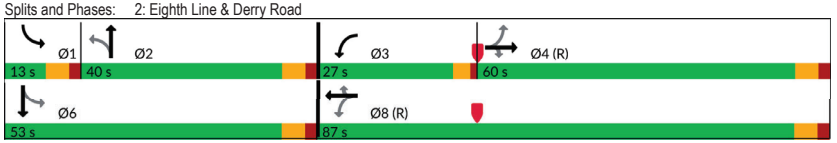
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1091	112	70	2201	8	89	13	71	20	35	8
Future Volume (vph)	10	1091	112	70	2201	8	89	13	71	20	35	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.873			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1672	0	1825	1867	0
Flt Permitted	0.043			0.183			0.729			0.493		
Satd. Flow (perm)	83	4520	1555	352	4565	1633	1400	1672	0	947	1867	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			105			70		71			6	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	10	1091	112	70	2201	8	89	13	71	20	35	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	10	1091	112	70	2201	8	89	84	0	20	43	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		11.0	36.0	
Total Split (s)	60.0	60.0	60.0	27.0	87.0	87.0	40.0	40.0		13.0	53.0	
Total Split (%)	42.9%	42.9%	42.9%	19.3%	62.1%	62.1%	28.6%	28.6%		9.3%	37.9%	
Maximum Green (s)	54.0	54.0	54.0	23.0	81.0	81.0	34.0	34.0		7.0	47.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0			0	
Act Effct Green (s)	96.4	96.4	96.4	107.4	105.4	105.4	14.6	14.6		22.6	22.6	
Actuated g/C Ratio	0.69	0.69	0.69	0.77	0.75	0.75	0.10	0.10		0.16	0.16	
v/c Ratio	0.18	0.35	0.10	0.20	0.64	0.01	0.61	0.35		0.10	0.14	
Control Delay (s/veh)	18.2	13.9	5.2	6.9	10.8	0.0	58.8	16.8		45.2	41.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	18.2	13.9	5.2	6.9	10.8	0.0	58.8	16.8		45.2	41.1	
LOS	B	B	A	A	B	A	E	B		D	D	
Approach Delay (s/veh)		13.1			10.7			38.4			42.4	
Approach LOS		B			B			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 13.3		Intersection LOS: B	
Intersection Capacity Utilization 79.8%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	10	1091	112	70	2201	8	89	84	20	43
v/c Ratio	0.18	0.35	0.10	0.20	0.64	0.01	0.61	0.35	0.10	0.14
Control Delay (s/veh)	18.2	13.9	5.2	6.9	10.8	0.0	58.8	16.8	45.2	41.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.2	13.9	5.2	6.9	10.8	0.0	58.8	16.8	45.2	41.1
Queue Length 50th (m)	2.3	114.0	17.6	4.7	123.6	0.0	25.8	12.7	4.6	8.6
Queue Length 95th (m)	m3.2	68.7	14.2	11.1	172.0	0.0	43.5	24.2	11.0	18.0
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	56	3110	1102	511	3436	1246	340	459	198	630
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.35	0.10	0.14	0.64	0.01	0.26	0.18	0.10	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1091	112	70	2201	8	89	13	71	20	35	8
Future Volume (vph)	10	1091	112	70	2201	8	89	13	71	20	35	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1672		1825	1867	
Flt Permitted	0.04	1.00	1.00	0.18	1.00	1.00	0.73	1.00		0.49	1.00	
Satd. Flow (perm)	82	4520	1555	351	4565	1633	1401	1672		947	1867	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	10	1091	112	70	2201	8	89	13	71	20	35	8
RTOR Reduction (vph)	0	0	35	0	0	2	0	64	0	0	5	0
Lane Group Flow (vph)	10	1091	77	70	2201	6	89	20	0	20	38	0
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	93.2	93.2	93.2	103.0	103.0	103.0	14.6	14.6		25.0	25.0	
Effective Green, g (s)	93.2	93.2	93.2	103.0	103.0	103.0	14.6	14.6		25.0	25.0	
Actuated g/C Ratio	0.67	0.67	0.67	0.74	0.74	0.74	0.10	0.10		0.18	0.18	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	54	3009	1035	319	3358	1201	146	174		196	333	
v/s Ratio Prot		0.24		0.01	c0.48			0.01		0.00	c0.02	
v/s Ratio Perm	0.12		0.05	0.15		0.00	c0.06			0.01		
v/c Ratio	0.19	0.36	0.07	0.22	0.66	0.00	0.61	0.12		0.10	0.11	
Uniform Delay, d1	8.9	10.3	8.2	5.9	9.4	4.9	60.0	56.9		47.9	48.2	
Progression Factor	0.75	1.26	1.97	1.00	1.00	1.00	0.70	0.80		1.00	1.00	
Incremental Delay, d2	6.9	0.3	0.1	0.3	1.0	0.0	6.9	0.3		0.2	0.2	
Delay (s)	13.6	13.3	16.3	6.3	10.5	4.9	49.0	45.7		48.1	48.4	
Level of Service	B	B	B	A	B	A	D	D		D	D	
Approach Delay (s/veh)		13.6			10.3			47.4			48.3	
Approach LOS		B			B			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	13.7	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.66				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		22.0	
Intersection Capacity Utilization	79.8%	ICU Level of Service		D	
Analysis Period (min)	15				

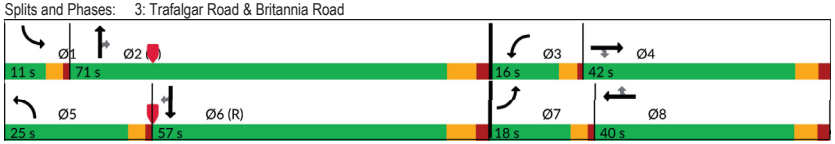
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
Future Volume (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			247			125			127			215
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	18.0	42.0	42.0	16.0	40.0	40.0	25.0	71.0	71.0	11.0	57.0	57.0
Total Split (%)	12.9%	30.0%	30.0%	11.4%	28.6%	28.6%	17.9%	50.7%	50.7%	7.9%	40.7%	40.7%
Maximum Green (s)	14.0	36.0	36.0	12.0	34.0	34.0	21.0	64.0	64.0	7.0	50.0	50.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	15.0	37.4	37.4	12.2	34.6	34.6	23.4	67.0	67.0	8.5	52.0	52.0
Actuated g/C Ratio	0.11	0.27	0.27	0.09	0.25	0.25	0.17	0.48	0.48	0.06	0.37	0.37
v/c Ratio	1.15	0.59	0.41	0.57	0.82	0.33	0.94	0.88	0.24	0.64	1.04	0.84
Control Delay (s/veh)	150.6	46.8	6.7	69.9	45.8	8.9	58.4	53.4	23.5	102.9	49.7	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	150.6	46.8	6.7	69.9	45.8	8.9	58.4	53.4	23.5	102.9	49.7	14.3
LOS	F	D	A	E	D	A	E	D	C	F	D	B
Approach Delay (s/veh)		68.8			44.5			52.1			43.6	
Approach LOS		E			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay (s/veh): 51.1		Intersection LOS: D	
Intersection Capacity Utilization 89.2%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
v/c Ratio	1.15	0.59	0.41	0.57	0.82	0.33	0.94	0.88	0.24	0.64	1.04	0.84
Control Delay (s/veh)	150.6	46.8	6.7	69.9	45.8	8.9	58.4	53.4	23.5	102.9	49.7	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	150.6	46.8	6.7	69.9	45.8	8.9	58.4	53.4	23.5	102.9	49.7	14.3
Queue Length 50th (m)	~71.0	71.7	0.0	24.4	102.0	15.9	~76.6	196.9	26.4	18.8	~217.7	111.5
Queue Length 95th (m)	#107.1	88.0	20.6	30.5	121.3	19.8	m66.1	m169.9	m21.6	m20.3	m179.4	m110.2
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	327	1214	610	328	1173	489	535	2074	815	187	1595	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.15	0.58	0.40	0.53	0.79	0.32	0.94	0.88	0.24	0.64	1.04	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
Future Volume (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	376	700	247	175	926	157	504	1824	194	120	1658	589
RTOR Reduction (vph)	0	0	181	0	0	94	0	0	66	0	0	135
Lane Group Flow (vph)	376	700	66	175	926	63	504	1824	128	120	1658	454
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	14.0	35.4	35.4	11.2	32.6	32.6	22.4	64.9	64.9	7.5	50.0	50.0
Effective Green, g (s)	15.0	37.4	37.4	12.2	34.6	34.6	23.4	66.9	66.9	8.5	52.0	52.0
Actuated g/C Ratio	0.11	0.27	0.27	0.09	0.25	0.25	0.17	0.48	0.48	0.06	0.37	0.37
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	327	1195	423	308	1128	380	535	2071	748	189	1595	570
v/s Ratio Prot	c0.12	c0.16		0.05	c0.20		c0.16	0.42		0.04	c0.39	
v/s Ratio Perm			0.04			0.04			0.08			0.30
v/c Ratio	1.15	0.59	0.16	0.57	0.82	0.17	0.94	0.88	0.17	0.63	1.04	0.80
Uniform Delay, d1	62.5	44.6	39.2	61.4	49.8	41.4	57.6	33.0	20.8	64.2	44.0	39.3
Progression Factor	1.00	1.00	1.00	1.02	0.79	0.65	0.94	1.58	2.98	1.49	0.50	0.33
Incremental Delay, d2	96.8	0.7	0.2	2.3	4.6	0.2	3.9	0.6	0.0	3.1	26.6	5.2
Delay (s)	159.3	45.3	39.4	65.0	44.0	27.1	58.0	52.8	61.9	98.8	48.4	18.2
Level of Service	F	D	D	E	D	C	E	D	E	F	D	B
Approach Delay (s/veh)		76.6			44.8			54.5			43.4	
Approach LOS		E			D			D			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	53.3	HCM 2000 Level of Service	D	
HCM 2000 Volume to Capacity ratio	0.95			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	89.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

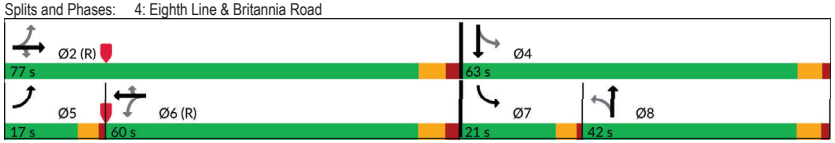
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	919	15	29	1182	46	39	108	45	69	108	42
Future Volume (vph)	18	919	15	29	1182	46	39	108	45	69	108	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.956			0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1815	0	1825	1789	0
Flt Permitted	0.157			0.262			0.662			0.353		
Satd. Flow (perm)	302	4476	1328	503	4520	1633	1272	1815	0	678	1789	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		14			17	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	18	919	15	29	1182	46	39	108	45	69	108	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	919	15	29	1182	46	39	153	0	69	150	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	17.0	77.0	77.0	60.0	60.0	60.0	42.0	42.0		21.0	63.0	
Total Split (%)	12.1%	55.0%	55.0%	42.9%	42.9%	42.9%	30.0%	30.0%		15.0%	45.0%	
Maximum Green (s)	12.5	70.2	70.2	53.2	53.2	53.2	36.3	36.3		16.5	57.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	99.8	97.5	97.5	93.1	93.1	93.1	17.4	17.4		31.2	30.0	
Actuated g/C Ratio	0.71	0.70	0.70	0.67	0.67	0.67	0.12	0.12		0.22	0.21	
v/c Ratio	0.06	0.29	0.02	0.09	0.39	0.04	0.25	0.64		0.29	0.38	
Control Delay (s/veh)	8.8	7.8	0.2	13.5	13.0	0.1	56.4	60.6		48.7	47.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.8	7.8	0.2	13.5	13.0	0.1	56.4	60.6		48.7	47.4	
LOS	A	A	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		7.7			12.5			59.8			47.8	
Approach LOS		A			B			E			D	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay (s/veh): 17.2 Intersection LOS: B
Intersection Capacity Utilization 64.3% ICU Level of Service C
Analysis Period (min) 15
* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	18	919	15	29	1182	46	39	153	69	150
v/c Ratio	0.06	0.29	0.02	0.09	0.39	0.04	0.25	0.64	0.29	0.38
Control Delay (s/veh)	8.8	7.8	0.2	13.5	13.0	0.1	56.4	60.6	48.7	47.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.8	7.8	0.2	13.5	13.0	0.1	56.4	60.6	48.7	47.4
Queue Length 50th (m)	1.1	25.7	0.0	2.4	53.5	0.0	9.4	36.1	17.8	37.2
Queue Length 95th (m)	m2.4	32.5	m0.1	9.6	98.1	0.3	m15.4	m49.2	28.6	53.0
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	351	3117	941	334	3005	1116	329	480	286	742
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.29	0.02	0.09	0.39	0.04	0.12	0.32	0.24	0.20

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	919	15	29	1182	46	39	108	45	69	108	42
Future Volume (vph)	18	919	15	29	1182	46	39	108	45	69	108	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1815		1825	1789	
Flt Permitted	0.16	1.00	1.00	0.26	1.00	1.00	0.66	1.00		0.35	1.00	
Satd. Flow (perm)	302	4476	1328	503	4520	1633	1271	1815		678	1789	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	18	919	15	29	1182	46	39	108	45	69	108	42
RTOR Reduction (vph)	0	0	5	0	0	17	0	12	0	0	13	0
Lane Group Flow (vph)	18	919	10	29	1182	29	39	141	0	69	137	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	96.6	96.6	96.6	89.5	89.5	89.5	17.4	17.4		30.9	30.9	
Effective Green, g (s)	96.6	96.6	96.6	89.5	89.5	89.5	17.4	17.4		30.9	30.9	
Actuated g/C Ratio	0.69	0.69	0.69	0.64	0.64	0.64	0.12	0.12		0.22	0.22	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	236	3088	916	321	2889	1043	157	225		223	394	
v/s Ratio Prot	0.00	c0.21			c0.26			c0.08		0.02	c0.08	
v/s Ratio Perm	0.05		0.01	0.06		0.02	0.03			0.05		
v/c Ratio	0.08	0.30	0.01	0.09	0.41	0.03	0.25	0.63		0.31	0.35	
Uniform Delay, d1	7.8	8.5	6.8	9.7	12.3	9.3	55.4	58.2		44.6	46.0	
Progression Factor	1.05	0.83	1.00	1.00	1.00	1.00	0.98	0.96		1.11	1.13	
Incremental Delay, d2	0.1	0.2	0.0	0.6	0.4	0.1	0.6	4.2		0.8	0.5	
Delay (s)	8.3	7.3	6.8	10.2	12.8	9.3	55.1	60.3		50.4	52.7	
Level of Service	A	A	A	B	B	A	E	E		D	D	
Approach Delay (s/veh)		7.3			12.6			59.2			51.9	
Approach LOS		A			B			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	17.4	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.44				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		21.5	
Intersection Capacity Utilization	64.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

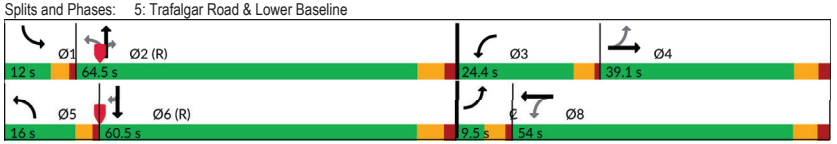
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	316	52	279	446	374	254	2149	319	261	1771	75
Future Volume (vph)	63	316	52	279	446	374	254	2149	319	261	1771	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	45.0		70.0	110.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		0	1		0	1		1	2		1
Taper Length (m)	100.0			100.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt		0.979			0.932				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	1839	0	1807	1757	0	1745	4378	1581	3319	4295	1551
Flt Permitted	0.110			0.191			0.070			0.950		
Satd. Flow (perm)	203	1839	0	363	1757	0	129	4378	1581	3319	4295	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			33				164			126
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	63	316	52	279	446	374	254	2149	319	261	1771	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	368	0	279	820	0	254	2149	319	261	1771	75
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0		6.1	10.0		2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6		6.1	0.6		2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2			6
Detector Phase	7	4		3	8		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0		7.0	10.0		7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2		11.5	24.2		11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	39.1		24.4	54.0		16.0	64.5	64.5	12.0	60.5	60.5
Total Split (%)	6.8%	27.9%		17.4%	38.6%		11.4%	46.1%	46.1%	8.6%	43.2%	43.2%
Maximum Green (s)	5.0	32.9		19.9	47.8		12.0	57.9	57.9	8.0	53.9	53.9
Yellow Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0		-1.0	-2.0		-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	43.0	36.3		60.0	51.7		73.5	59.9	59.9	9.0	55.9	55.9
Actuated g/C Ratio	0.31	0.26		0.43	0.37		0.53	0.43	0.43	0.06	0.40	0.40
v/c Ratio	0.49	0.77		0.78	1.23		1.17	1.15	0.41	1.23	1.03	0.11
Control Delay (s/veh)	38.9	59.2		53.1	156.8		148.9	110.2	14.6	163.4	84.5	12.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	59.2		53.1	156.8		148.9	110.2	14.6	163.4	84.5	12.2
LOS	D	E		D	F		F	F	B	F	F	B
Approach Delay (s/veh)		56.2			130.4			102.6			91.7	
Approach LOS		E			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay (s/veh): 100.6		Intersection LOS: F	
Intersection Capacity Utilization 113.5%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	368	279	820	254	2149	319	261	1771	75
v/c Ratio	0.49	0.77	0.78	1.23	1.17	1.15	0.41	1.23	1.03	0.11
Control Delay (s/veh)	38.9	59.2	53.1	156.8	148.9	110.2	14.6	163.4	84.5	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.9	59.2	53.1	156.8	148.9	110.2	14.6	163.4	84.5	12.2
Queue Length 50th (m)	10.6	96.1	76.1	~279.5	~67.2	~297.1	28.0	~47.6	~220.1	3.4
Queue Length 95th (m)	20.0	#140.9	m92.2	m#360.4	#122.0	#329.7	52.5	m#52.1	m#190.0	m4.9
Internal Link Dist (m)		1293.1		1410.4		889.5			3062.5	
Turn Bay Length (m)	45.0		110.0		100.0		70.0	170.0		70.0
Base Capacity (vph)	128	481	371	669	217	1873	770	213	1714	694
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.77	0.75	1.23	1.17	1.15	0.41	1.23	1.03	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	316	52	279	446	374	254	2149	319	261	1771	75
Future Volume (vph)	63	316	52	279	446	374	254	2149	319	261	1771	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2		3.5	4.2		3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	0.98		1.00	0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1755	1838		1807	1756		1745	4378	1581	3319	4295	1551
Flt Permitted	0.11	1.00		0.19	1.00		0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	204	1838		363	1756		129	4378	1581	3319	4295	1551
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	63	316	52	279	446	374	254	2149	319	261	1771	75
RTOR Reduction (vph)	0	4	0	0	21	0	0	0	95	0	0	46
Lane Group Flow (vph)	63	364	0	279	799	0	254	2149	224	261	1771	29
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2			6
Actuated Green, G (s)	39.2	35.2		58.2	49.7		69.0	57.0	57.0	8.0	53.0	53.0
Effective Green, g (s)	41.2	37.2		59.2	51.7		70.0	59.0	59.0	9.0	55.0	55.0
Actuated g/C Ratio	0.29	0.27		0.42	0.37		0.50	0.42	0.42	0.06	0.39	0.39
Clearance Time (s)	4.5	6.2		4.5	6.2		4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	115	488		354	648		214	1845	666	213	1687	609
v/s Ratio Prot	0.02	0.20		c0.11	c0.46		c0.11	c0.49		0.08	0.41	
v/s Ratio Perm	0.14			0.22			0.48		0.14			0.02
v/c Ratio	0.55	0.75		0.79	1.23		1.19	1.16	0.34	1.23	1.05	0.05
Uniform Delay, d1	40.0	47.1		30.8	44.2		44.2	40.5	27.3	65.5	42.5	26.3
Progression Factor	1.00	1.00		1.59	1.43		1.00	1.00	1.00	0.85	1.54	35.63
Incremental Delay, d2	5.3	7.3		6.4	112.5		121.2	80.5	1.4	117.2	29.3	0.1
Delay (s)	45.2	54.4		55.3	175.5		165.4	121.0	28.7	172.9	94.6	937.3
Level of Service	D	D		E	F		F	F	C	F	F	F
Approach Delay (s/veh)		53.0			145.0			114.3			134.3	
Approach LOS		D			F			F			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	122.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	113.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

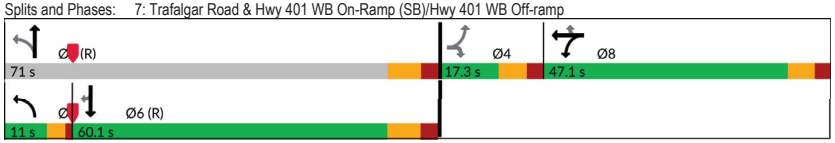
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	17	754	27	1396	7	1094	0	0	997	45
Future Volume (vph)	17	0	17	754	27	1396	7	1094	0	0	997	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	4309	0	0	4350	1306
Flt Permitted	0.597			0.950			0.107					
Satd. Flow (perm)	1147	0	1633	3372	1921	2737	206	4309	0	0	4350	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			277						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Adj. Flow (vph)	17	0	17	754	27	1396	7	1094	0	0	997	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	17	754	27	1396	7	1094	0	0	997	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.7		10.7	60.5	60.5	60.5	52.9	48.8			46.6	46.6
Actuated g/C Ratio	0.08		0.08	0.45	0.45	0.45	0.39	0.36			0.34	0.34
v/c Ratio	0.19		0.07	0.50	0.03	1.02	0.04	0.71			0.67	0.08
Control Delay (s/veh)	63.0		0.5	31.2	27.9	58.5	22.7	39.5			40.2	0.3
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.0		0.5	31.2	27.9	58.5	22.7	39.5			40.2	0.3
LOS	E		A	C	C	E	C	D			D	A
Approach Delay (s/veh)		31.8			48.7			39.4			38.5	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay (s/veh): 43.8		Intersection LOS: D	
Intersection Capacity Utilization 89.3%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp

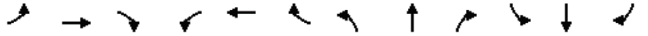


Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	17	754	27	1396	7	1094	997	45
v/c Ratio	0.19	0.07	0.50	0.03	1.02	0.04	0.71	0.67	0.08
Control Delay (s/veh)	63.0	0.5	31.2	27.9	58.5	22.7	39.5	40.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.0	0.5	31.2	27.9	58.5	22.7	39.5	40.2	0.3
Queue Length 50th (m)	4.4	0.0	81.7	4.3	~221.1	1.2	111.3	97.4	0.0
Queue Length 95th (m)	12.1	0.0	119.9	12.3	#306.8	3.7	114.6	116.8	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	90	248	1504	857	1375	163	2003	1669	577
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	0.50	0.03	1.02	0.04	0.55	0.60	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	17	754	27	1396	7	1094	0	0	997	45
Future Volume (vph)	17	0	17	754	27	1396	7	1094	0	0	997	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	4309			4350	1306
Flt Permitted	0.60		1.00	0.95	1.00	1.00	0.11	1.00			1.00	1.00
Satd. Flow (perm)	1147		1633	3372	1921	2737	206	4309			4350	1306
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	17	754	27	1396	7	1094	0	0	997	45
RTOR Reduction (vph)	0	0	16	0	0	153	0	0	0	0	0	32
Lane Group Flow (vph)	17	0	1	754	27	1243	7	1094	0	0	997	13
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.7		6.7	60.5	60.5	60.5	45.8	45.8			40.4	40.4
Effective Green, g (s)	6.7		6.7	60.5	60.5	60.5	45.8	45.8			40.4	40.4
Actuated g/C Ratio	0.05		0.05	0.45	0.45	0.45	0.34	0.34			0.30	0.30
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		80	1505	857	1222	86	1456			1296	389
v/s Ratio Prot				0.22	0.01		0.00	c0.25			0.23	
v/s Ratio Perm	c0.01		0.00			c0.45	0.03					0.01
v/c Ratio	0.30		0.01	0.50	0.03	1.02	0.08	0.75			0.77	0.03
Uniform Delay, d1	62.1		61.2	26.7	21.1	37.5	32.0	39.8			43.3	33.7
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.1		0.1	0.1	0.0	30.0	0.1	3.6			4.4	0.2
Delay (s)	65.2		61.3	26.8	21.1	67.5	32.2	43.4			47.7	33.9
Level of Service	E		E	C	C	E	C	D			D	C
Approach Delay (s/veh)		63.3			52.9			43.3			47.1	
Approach LOS		E			D			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	49.2	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.90				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5		
Intersection Capacity Utilization	89.3%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

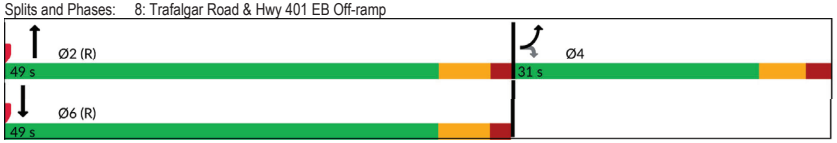
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	596	0	1428	1327	0
Future Volume (vph)	147	596	0	1428	1327	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.900	0.850				
Flt Protected	0.984					
Satd. Flow (prot)	2947	1327	0	4309	4350	0
Flt Permitted	0.984					
Satd. Flow (perm)	2947	1327	0	4309	4350	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	36	36				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Adj. Flow (vph)	147	596	0	1428	1327	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	445	298	0	1428	1327	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	20.6	20.6		45.4	45.4	
Actuated g/C Ratio	0.26	0.26		0.57	0.57	
v/c Ratio	0.57	0.81		0.58	0.54	
Control Delay (s/veh)	25.9	41.5		13.2	12.6	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	25.9	41.5		13.2	12.6	
LOS	C	D		B	B	
Approach Delay (s/veh)	32.2			13.2	12.6	
Approach LOS	C			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay (s/veh): 17.0		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	445	298	1428	1327
v/c Ratio	0.57	0.81	0.58	0.54
Control Delay (s/veh)	25.9	41.5	13.2	12.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.9	41.5	13.2	12.6
Queue Length 50th (m)	29.8	44.3	58.8	52.1
Queue Length 95th (m)	42.0	#74.8	82.7	73.5
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	927	431	2474	2498
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.48	0.69	0.58	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	596	0	1428	1327	0
Future Volume (vph)	147	596	0	1428	1327	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.98	1.00		1.00	1.00	
Satd. Flow (prot)	2945	1327		4309	4350	
Flt Permitted	0.98	1.00		1.00	1.00	
Satd. Flow (perm)	2945	1327		4309	4350	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	596	0	1428	1327	0
RTOR Reduction (vph)	27	27	0	0	0	0
Lane Group Flow (vph)	418	271	0	1428	1327	0
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	20.6	20.6		45.4	45.4	
Effective Green, g (s)	20.6	20.6		45.4	45.4	
Actuated g/C Ratio	0.26	0.26		0.57	0.57	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	758	341		2445	2468	
v/s Ratio Prot	0.14			c0.33	0.31	
v/s Ratio Perm		c0.20				
v/c Ratio	0.55	0.80		0.58	0.54	
Uniform Delay, d1	25.7	27.7		11.2	10.8	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	12.1		1.0	0.8	
Delay (s)	26.6	39.8		12.2	11.6	
Level of Service	C	D		B	B	
Approach Delay (s/veh)	31.9			12.2	11.6	
Approach LOS	C			B	B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

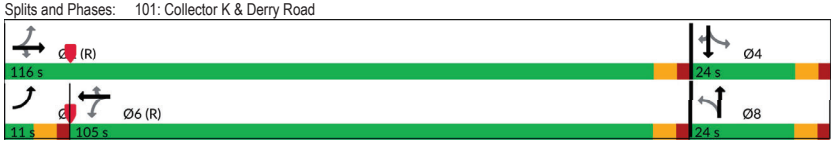
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	1364	221	21	3195	11	152	0	6	18	0	8
Future Volume (vph)	62	1364	221	21	3195	11	152	0	6	18	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.037			0.153			0.757			0.754		
Satd. Flow (perm)	70	4520	1601	288	4520	1601	1426	1601	0	1420	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221			70		110				70
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	62	1364	221	21	3195	11	152	0	6	18	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	1364	221	21	3195	11	152	6	0	18	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	116.0	116.0	105.0	105.0	105.0	24.0	24.0		24.0	24.0	24.0
Total Split (%)	7.9%	82.9%	82.9%	75.0%	75.0%	75.0%	17.1%	17.1%		17.1%	17.1%	17.1%
Maximum Green (s)	5.0	110.0	110.0	99.0	99.0	99.0	18.0	18.0		18.0	18.0	18.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		None	None	None
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	110.8	110.8	110.8	102.0	102.0	102.0	17.2	17.2		17.2		17.2
Actuated g/C Ratio	0.79	0.79	0.79	0.73	0.73	0.73	0.12	0.12		0.12		0.12
v/c Ratio	0.53	0.38	0.17	0.10	0.97	0.01	0.87	0.02		0.10		0.03
Control Delay (s/veh)	30.7	4.8	0.7	3.9	16.3	0.0	100.4	0.2		55.6		0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	30.7	4.8	0.7	3.9	16.3	0.0	100.4	0.2		55.6		0.3
LOS	C	A	A	A	B	A	F	A		E		A
Approach Delay (s/veh)		5.2			16.2			96.6			38.6	
Approach LOS		A			B			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay (s/veh): 15.2		Intersection LOS: B	
Intersection Capacity Utilization 89.3%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	62	1364	221	21	3195	11	152	6	18	8
v/c Ratio	0.53	0.38	0.17	0.10	0.97	0.01	0.87	0.02	0.10	0.03
Control Delay (s/veh)	30.7	4.8	0.7	3.9	16.3	0.0	100.4	0.2	55.6	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.7	4.8	0.7	3.9	16.3	0.0	100.4	0.2	55.6	0.3
Queue Length 50th (m)	3.3	41.8	0.0	0.8	~103.1	0.0	42.3	0.0	4.6	0.0
Queue Length 95th (m)	17.2	48.3	4.9	m0.9	m68.0	m0.0	#80.7	0.0	12.4	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	118	3576	1313	209	3292	1185	183	301	182	266
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.38	0.17	0.10	0.97	0.01	0.83	0.02	0.10	0.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	1364	221	21	3195	11	152	0	6	18	0	8
Future Volume (vph)	62	1364	221	21	3195	11	152	0	6	18	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	4520	1601	1789	4520	1601	1789	1601		1789		1601
Flt Permitted	0.04	1.00	1.00	0.15	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	71	4520	1601	289	4520	1601	1426	1601		1420		1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	62	1364	221	21	3195	11	152	0	6	18	0	8
RTOR Reduction (vph)	0	0	46	0	0	3	0	5	0	0	0	7
Lane Group Flow (vph)	62	1364	175	21	3195	8	152	1	0	18	0	1
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	110.8	110.8	110.8	100.8	100.8	100.8	17.2	17.2		17.2		17.2
Effective Green, g (s)	110.8	110.8	110.8	100.8	100.8	100.8	17.2	17.2		17.2		17.2
Actuated g/C Ratio	0.79	0.79	0.79	0.72	0.72	0.72	0.12	0.12		0.12		0.12
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	105	3577	1267	208	3254	1152	175	196		174		196
v/s Ratio Prot	0.02	c0.30			c0.71			0.00				
v/s Ratio Perm	0.45		0.11	0.07		0.00	c0.11			0.01		0.00
v/c Ratio	0.59	0.38	0.14	0.10	0.98	0.01	0.87	0.00		0.10		0.01
Uniform Delay, d1	42.2	4.4	3.4	5.9	18.7	5.5	60.3	53.9		54.5		53.9
Progression Factor	1.00	1.00	1.00	0.50	0.53	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	8.6	0.3	0.2	0.4	6.8	0.0	33.6	0.0		0.3		0.0
Delay (s)	50.8	4.7	3.6	3.4	16.8	5.5	93.9	53.9		54.8		53.9
Level of Service	D	A	A	A	B	A	F	D		D		D
Approach Delay (s/veh)		6.3			16.6			92.4			54.5	
Approach LOS		A			B			F			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	15.8	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.96				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	89.3%	ICU Level of Service		E	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1261	223	0	2418	10	0	0	92	0	0	46
Future Volume (vph)	0	1261	223	0	2418	10	0	0	92	0	0	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	4520	1601	0	4516	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1261	223	0	2418	10	0	0	92	0	0	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1261	223	0	2428	0	0	0	92	0	0	46
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1261	223	0	2418	10	0	0	92	0	0	46
Future Volume (Veh/h)	0	1261	223	0	2418	10	0	0	92	0	0	46
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1261	223	0	2418	10	0	0	92	0	0	46
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.72			0.86			0.79	0.79	0.86	0.79	0.79	0.72
vC, conflicting volume	2428			1484			2113	3689	420	2935	3907	811
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1617			980			257	2251	0	1297	2527	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	90	100	100	94
cM capacity (veh/h)	287			600			502	32	929	85	22	779

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	420	420	420	223	967	967	494	92	46
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	223	0	0	10	92	46
cSH	1700	1700	1700	1700	1700	1700	1700	929	779
Volume to Capacity	0.25	0.25	0.25	0.13	0.57	0.57	0.29	0.10	0.06
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	9.9
Lane LOS								A	A
Approach Delay (s/veh)	0.0				0.0			9.3	9.9
Approach LOS								A	A

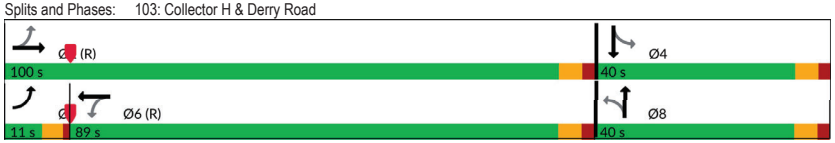
Intersection Summary					
Average Delay	0.3				
Intersection Capacity Utilization	56.9%	ICU Level of Service		B	
Analysis Period (min)	15				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	1199	129	29	2363	13	108	0	14	24	12	53
Future Volume (vph)	62	1199	129	29	2363	13	108	0	14	24	12	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.999			0.985			0.920	
Flt Protected	0.950			0.950				0.958			0.987	
Satd. Flow (prot)	1789	4452	0	1789	4516	0	0	1777	0	0	1710	0
Flt Permitted	0.037			0.160				0.617			0.928	
Satd. Flow (perm)	70	4452	0	301	4516	0	0	1145	0	0	1608	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			1			58			50	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	62	1199	129	29	2363	13	108	0	14	24	12	53
Shared Lane Traffic (%)												
Lane Group Flow (vph)	62	1328	0	29	2376	0	0	122	0	0	89	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	9.5	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	11.0	100.0		89.0	89.0		40.0	40.0		40.0	40.0	
Total Split (%)	7.9%	71.4%		63.6%	63.6%		28.6%	28.6%		28.6%	28.6%	
Maximum Green (s)	6.5	94.0		83.0	83.0		34.0	34.0		34.0	34.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)		9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	115.5	114.0		104.8	104.8			14.0			14.0	
Actuated g/C Ratio	0.83	0.81		0.75	0.75			0.10			0.10	
v/c Ratio	0.44	0.37		0.13	0.70			0.73			0.43	
Control Delay (s/veh)	30.4	5.8		10.1	10.5			56.9			32.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	30.4	5.8		10.1	10.5			56.9			32.6	
LOS	C	A		B	B			E			C	
Approach Delay (s/veh)		6.9			10.5			56.9			32.6	
Approach LOS		A			B			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 11.2		Intersection LOS: B	
Intersection Capacity Utilization 75.0%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	62	1328	29	2376	122	89
v/c Ratio	0.44	0.37	0.13	0.70	0.73	0.43
Control Delay (s/veh)	30.4	5.8	10.1	10.5	56.9	32.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	30.4	5.8	10.1	10.5	56.9	32.6
Queue Length 50th (m)	7.3	24.9	1.8	72.1	17.8	10.6
Queue Length 95th (m)	m19.4	m48.5	m5.0	127.7	38.5	26.8
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	144	3631	225	3382	321	428
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.37	0.13	0.70	0.38	0.21

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	1199	129	29	2363	13	108	0	14	24	12	53
Future Volume (vph)	62	1199	129	29	2363	13	108	0	14	24	12	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.98			0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4454		1789	4517			1776			1709	
Flt Permitted	0.04	1.00		0.16	1.00			0.62			0.93	
Satd. Flow (perm)	69	4454		302	4517			1144			1607	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	62	1199	129	29	2363	13	108	0	14	24	12	53
RTOR Reduction (vph)	0	4	0	0	0	0	0	52	0	0	45	0
Lane Group Flow (vph)	62	1324	0	29	2376	0	0	70	0	0	44	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	114.0	114.0		103.9	103.9			14.0			14.0	
Effective Green, g (s)	114.0	114.0		103.9	103.9			14.0			14.0	
Actuated g/C Ratio	0.81	0.81		0.74	0.74			0.10			0.10	
Clearance Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	124	3626		224	3352			114			160	
v/s Ratio Prot	c0.02	0.30			c0.53							
v/s Ratio Perm	0.38			0.10				c0.06			0.03	
v/c Ratio	0.50	0.37		0.13	0.71			0.61			0.28	
Uniform Delay, d1	16.6	3.4		5.1	9.8			60.4			58.3	
Progression Factor	1.59	1.52		1.26	0.89			1.00			0.95	
Incremental Delay, d2	2.7	0.2		0.9	1.0			9.4			0.9	
Delay (s)	29.2	5.5		7.4	9.7			69.8			56.3	
Level of Service	C	A		A	A			E			E	
Approach Delay (s/veh)		6.5			9.7			69.8			56.3	
Approach LOS		A			A			E			E	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	11.4	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.69				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		16.5	
Intersection Capacity Utilization	75.0%	ICU Level of Service		D	
Analysis Period (min)	15				

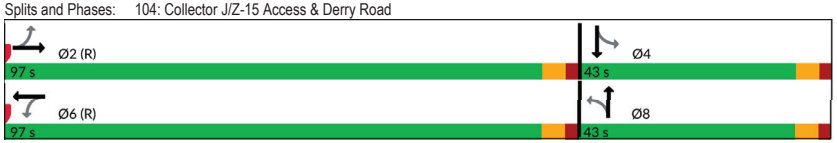
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1187	213	18	2269	13	144	0	20	30	0	107
Future Volume (vph)	36	1187	213	18	2269	13	144	0	20	30	0	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.999			0.984			0.895	
Flt Protected	0.950			0.950				0.958			0.989	
Satd. Flow (prot)	1789	4416	0	1789	4516	0	0	1775	0	0	1667	0
Flt Permitted	0.038			0.132				0.548			0.925	
Satd. Flow (perm)	72	4416	0	249	4516	0	0	1016	0	0	1559	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42			1			23			23	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	1187	213	18	2269	13	144	0	20	30	0	107
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	1400	0	18	2282	0	0	164	0	0	137	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	97.0	97.0		97.0	97.0		43.0	43.0		43.0	43.0	
Total Split (%)	69.3%	69.3%		69.3%	69.3%		30.7%	30.7%		30.7%	30.7%	
Maximum Green (s)	91.0	91.0		91.0	91.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	105.0	105.0		105.0	105.0			23.0			23.0	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.16			0.16	
v/c Ratio	0.68	0.42		0.10	0.67			0.88			0.50	
Control Delay (s/veh)	80.1	7.1		8.2	8.7			88.9			48.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	80.1	7.1		8.2	8.7			88.9			48.6	
LOS	F	A		A	A			F			D	
Approach Delay (s/veh)		9.0			8.7			88.9			48.6	
Approach LOS		A			A			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 70.0%		ICU Level of Service C	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	36	1400	18	2282	164	137
v/c Ratio	0.68	0.42	0.10	0.67	0.88	0.50
Control Delay (s/veh)	80.1	7.1	8.2	8.7	88.9	48.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	80.1	7.1	8.2	8.7	88.9	48.6
Queue Length 50th (m)	9.1	122.7	1.2	104.9	39.7	29.4
Queue Length 95th (m)	#28.0	20.5	m3.0	103.6	62.5	47.0
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	53	3321	186	3386	285	428
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.42	0.10	0.67	0.58	0.32

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

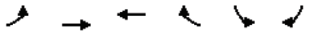
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	1187	213	18	2269	13	144	0	20	30	0	107
Future Volume (vph)	36	1187	213	18	2269	13	144	0	20	30	0	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.98			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4417		1789	4516			1775			1667	
Flt Permitted	0.04	1.00		0.13	1.00			0.55			0.92	
Satd. Flow (perm)	72	4417		248	4516			1015			1558	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	1187	213	18	2269	13	144	0	20	30	0	107
RTOR Reduction (vph)	0	11	0	0	0	0	0	19	0	0	19	0
Lane Group Flow (vph)	36	1390	0	18	2282	0	0	145	0	0	118	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	105.0	105.0		105.0	105.0			23.0			23.0	
Effective Green, g (s)	105.0	105.0		105.0	105.0			23.0			23.0	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.16			0.16	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	54	3312		186	3387			166			255	
v/s Ratio Prot		0.31			c0.51							
v/s Ratio Perm	0.50			0.07				c0.14			0.08	
v/c Ratio	0.67	0.42		0.10	0.67			0.87			0.46	
Uniform Delay, d1	8.8	6.4		4.7	8.8			57.1			52.9	
Progression Factor	1.58	0.98		1.06	0.78			1.00			1.00	
Incremental Delay, d2	48.7	0.4		0.8	0.9			36.0			1.3	
Delay (s)	62.5	6.6		5.8	7.8			93.1			54.2	
Level of Service	E	A		A	A			F			D	
Approach Delay (s/veh)		8.0			7.7			93.1			54.2	
Approach LOS		A			A			F			D	

Intersection Summary

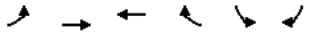
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1382	3184	32	0	22
Future Volume (vph)	0	1382	3184	32	0	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	*0.80	*0.80	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	4520	3014	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	4520	3014	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1382	3184	32	0	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1382	3184	32	0	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		
* User Entered Value			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1382	3184	32	0	22
Future Volume (Veh/h)	0	1382	3184	32	0	22
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1382	3184	32	0	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.62				0.65	0.62
vC, conflicting volume	3216				3645	1592
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3351				3271	711
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	90
cM capacity (veh/h)	50				4	231

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	461	461	461	1592	1592	32	22
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	32	22
cSH	1700	1700	1700	1700	1700	1700	231
Volume to Capacity	0.27	0.27	0.27	0.94	0.94	0.02	0.10
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	22.2
Lane LOS							C
Approach Delay (s/veh)	0.0			0.0			22.2
Approach LOS							C

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	98.0%	ICU Level of Service		F
Analysis Period (min)	15			

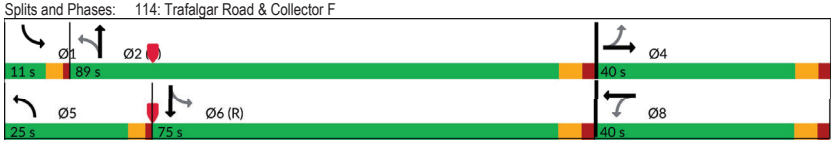
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	50	48	48	46	89	77	1457	184	157	2066	96
Future Volume (vph)	37	50	48	48	46	89	77	1457	184	157	2066	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		0.0	70.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.927			0.901			0.983			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1669	0	1652	1622	0	1711	4346	0	1711	4390	0
Flt Permitted	0.447			0.623			0.043			0.082		
Satd. Flow (perm)	777	1669	0	1083	1622	0	77	4346	0	148	4390	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			66			23			6	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	37	50	48	48	46	89	77	1457	184	157	2066	96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	98	0	48	135	0	77	1641	0	157	2162	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	12.9	12.9		12.9	12.9		106.2	96.2		117.1	103.1	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.76	0.69		0.84	0.74	
v/c Ratio	0.52	0.54		0.48	0.65		0.51	0.55		0.54	0.67	
Control Delay (s/veh)	85.1	50.1		75.5	45.2		44.9	12.9		26.5	7.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	85.1	50.1		75.5	45.2		44.9	12.9		26.5	7.2	
LOS	F	D		E	D		D	B		C	A	
Approach Delay (s/veh)		59.7			53.2			14.4			8.5	
Approach LOS		E			D			B			A	

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay (s/veh): 14.3 Intersection LOS: B
Intersection Capacity Utilization 82.9% ICU Level of Service E
Analysis Period (min) 15
* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	37	98	48	135	77	1641	157	2162
v/c Ratio	0.52	0.54	0.48	0.65	0.51	0.55	0.54	0.67
Control Delay (s/veh)	85.1	50.1	75.5	45.2	44.9	12.9	26.5	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	85.1	50.1	75.5	45.2	44.9	12.9	26.5	7.2
Queue Length 50th (m)	10.3	17.8	13.1	19.0	12.7	173.2	19.8	67.7
Queue Length 95th (m)	m21.7	35.4	m25.7	m39.8	m7.5	m172.2	44.4	65.6
Internal Link Dist (m)		200.2		176.3		308.8		241.5
Turn Bay Length (m)	60.0		50.0		50.0		70.0	
Base Capacity (vph)	188	430	263	443	309	2994	289	3235
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.23	0.18	0.30	0.25	0.55	0.54	0.67

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	50	48	48	46	89	77	1457	184	157	2066	96
Future Volume (vph)	37	50	48	48	46	89	77	1457	184	157	2066	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.93		1.00	0.90		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	1668		1652	1623		1711	4347		1711	4391	
Flt Permitted	0.45	1.00		0.62	1.00		0.04	1.00		0.08	1.00	
Satd. Flow (perm)	777	1668		1083	1623		77	4347		148	4391	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	37	50	48	48	46	89	77	1457	184	157	2066	96
RTOR Reduction (vph)	0	30	0	0	60	0	0	7	0	0	2	0
Lane Group Flow (vph)	37	68	0	48	75	0	77	1634	0	157	2160	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.9	12.9		12.9	12.9		104.2	96.2		115.1	103.1	
Effective Green, g (s)	12.9	12.9		12.9	12.9		104.2	96.2		115.1	103.1	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.74	0.69		0.82	0.74	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	71	153		99	149		150	2987		288	3233	
v/s Ratio Prot		0.04			0.05		0.03	0.38		c0.06	c0.49	
v/s Ratio Perm	c0.05			0.04			0.35			0.39		
v/c Ratio	0.52	0.44		0.48	0.50		0.51	0.55		0.55	0.67	
Uniform Delay, d1	60.6	60.2		60.4	60.5		13.0	11.0		13.9	9.6	
Progression Factor	1.00	1.00		1.00	0.99		2.04	1.12		1.71	0.61	
Incremental Delay, d2	6.7	2.1		3.7	2.7		0.3	0.1		1.6	0.8	
Delay (s)	67.5	62.1		64.0	62.4		26.7	12.3		25.4	6.7	
Level of Service	E	E		E	E		C	B		C	A	
Approach Delay (s/veh)		63.6			62.8			13.0			8.0	
Approach LOS		E			E			B			A	

Intersection Summary

HCM 2000 Control Delay (s/veh)	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	58	476	233	146	69	378	1497	107	100	1821	426
Future Volume (vph)	143	58	476	233	146	69	378	1497	107	100	1821	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.866			0.952			0.990			0.972	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3099	0	1789	3407	0	1711	4377	0	1711	4297	0
Flt Permitted	0.572			0.186			0.063			0.102		
Satd. Flow (perm)	1077	3099	0	350	3407	0	113	4377	0	184	4297	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		208			53			9			37	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	143	58	476	233	146	69	378	1497	107	100	1821	426
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	534	0	233	215	0	378	1604	0	100	2247	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

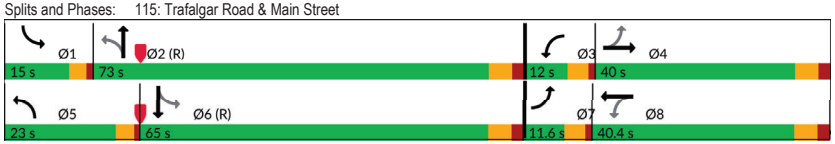
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0		9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	11.6	40.0		12.0	40.4		23.0	73.0		15.0	65.0	
Total Split (%)	8.3%	28.6%		8.6%	28.9%		16.4%	52.1%		10.7%	46.4%	
Maximum Green (s)	7.1	34.0		7.5	34.4		19.0	67.0		11.0	59.0	
Yellow Time (s)	3.5	4.0		3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Don't Walk (s)		27.0			27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	29.7	21.1		30.5	21.5		96.9	81.1		70.8	59.0	
Actuated g/C Ratio	0.21	0.15		0.22	0.15		0.69	0.58		0.51	0.42	
v/c Ratio	0.54	1.14dr		1.52	0.38		0.86	0.63		0.50	1.23	
Control Delay (s/veh)	51.6	46.1		300.7	40.6		58.3	28.1		25.0	144.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	51.6	46.1		300.7	40.6		58.3	28.1		25.0	144.6	
LOS	D	D		F	D		E	C		C	F	
Approach Delay (s/veh)		47.3			175.9			33.9			139.5	
Approach LOS		D			F			C			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.52		
Intersection Signal Delay (s/veh): 92.7		Intersection LOS: F
Intersection Capacity Utilization 112.7%		ICU Level of Service H
Analysis Period (min) 15		

* User Entered Value

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	143	534	233	215	378	1604	100	2247
v/c Ratio	0.54	1.14dr	1.52	0.38	0.86	0.63	0.50	1.23
Control Delay (s/veh)	51.6	46.1	300.7	40.6	58.3	28.1	25.0	144.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.6	46.1	300.7	40.6	58.3	28.1	25.0	144.6
Queue Length 50th (m)	33.2	48.6	~74.2	21.6	93.8	108.0	10.2	~323.7
Queue Length 95th (m)	49.1	65.2	#115.1	32.0	#171.1	160.4	23.1	#355.1
Internal Link Dist (m)		882.8		603.0		688.8		212.3
Turn Bay Length (m)	60.0		90.0		50.0		50.0	
Base Capacity (vph)	264	910	153	877	442	2540	223	1832
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.59	1.52	0.25	0.86	0.63	0.45	1.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	58	476	233	146	69	378	1497	107	100	1821	426
Future Volume (vph)	143	58	476	233	146	69	378	1497	107	100	1821	426
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.87		1.00	0.95		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3100		1789	3406		1711	4377		1711	4295	
Flt Permitted	0.57	1.00		0.19	1.00		0.06	1.00		0.10	1.00	
Satd. Flow (perm)	1077	3100		350	3406		114	4377		183	4295	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	143	58	476	233	146	69	378	1497	107	100	1821	426
RTOR Reduction (vph)	0	177	0	0	45	0	0	4	0	0	21	0
Lane Group Flow (vph)	143	357	0	233	170	0	378	1600	0	100	2226	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	28.2	21.1		29.0	21.5		94.9	81.1		68.8	59.0	
Effective Green, g (s)	28.2	21.1		29.0	21.5		94.9	81.1		68.8	59.0	
Actuated g/C Ratio	0.20	0.15		0.21	0.15		0.68	0.58		0.49	0.42	
Clearance Time (s)	4.5	6.0		4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	253	467		149	523		441	2535		196	1810	
v/s Ratio Prot	0.03	0.12		c0.08	0.05		c0.20	0.37		0.04	c0.52	
v/s Ratio Perm	0.09			c0.24			0.38			0.21		
v/c Ratio	0.57	1.14dr		1.56	0.33		0.86	0.63		0.51	1.23	
Uniform Delay, d1	49.1	57.1		52.8	52.8		43.4	19.5		19.5	40.5	
Progression Factor	1.00	1.00		1.00	1.00		1.03	1.29		1.16	1.09	
Incremental Delay, d2	2.9	7.3		283.7	0.4		14.0	1.1		2.1	108.1	
Delay (s)	52.0	64.4		336.5	53.2		58.6	26.4		24.8	152.4	
Level of Service	D	E		F	D		E	C		C	F	
Approach Delay (s/veh)		61.8			200.5			32.5			147.0	
Approach LOS		E			F			C			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	99.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	112.7%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

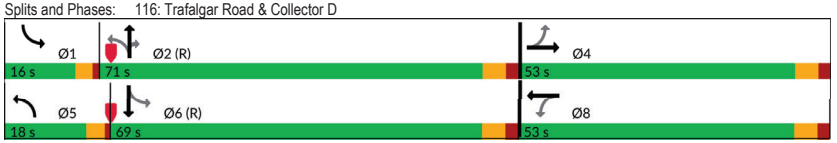
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	18	109	208	21	269	178	1353	54	125	1978	205
Future Volume (vph)	88	18	109	208	21	269	178	1353	54	125	1978	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.871			0.861				0.850		0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1568	0	1652	1550	0	1711	4421	1566	1711	4359	0
Flt Permitted	0.303			0.626			0.048			0.124		
Satd. Flow (perm)	527	1568	0	1088	1550	0	86	4421	1566	223	4359	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		109			192				55		14	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	88	18	109	208	21	269	178	1353	54	125	1978	205
Shared Lane Traffic (%)												
Lane Group Flow (vph)	88	127	0	208	290	0	178	1353	54	125	2183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0	26.0	11.0	26.0	
Total Split (s)	53.0	53.0		53.0	53.0		18.0	71.0	71.0	16.0	69.0	
Total Split (%)	37.9%	37.9%		37.9%	37.9%		12.9%	50.7%	50.7%	11.4%	49.3%	
Maximum Green (s)	47.0	47.0		47.0	47.0		14.0	65.0	65.0	12.0	63.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	31.1	31.1		31.1	31.1		98.1	82.8	82.8	90.9	78.8	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.70	0.59	0.59	0.65	0.56	
v/c Ratio	0.75	0.29		0.86	0.59		0.79	0.52	0.06	0.50	0.89	
Control Delay (s/veh)	85.2	11.1		82.1	19.9		84.0	4.4	0.9	18.1	40.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	85.2	11.1		82.1	19.9		84.0	4.4	0.9	18.1	40.0	
LOS	F	B		F	B		F	A	A	B	D	
Approach Delay (s/veh)		41.4			45.9			13.2			38.9	
Approach LOS		D			D			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 30.9		Intersection LOS: C	
Intersection Capacity Utilization 97.0%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	88	127	208	290	178	1353	54	125	2183
v/c Ratio	0.75	0.29	0.86	0.59	0.79	0.52	0.06	0.50	0.89
Control Delay (s/veh)	85.2	11.1	82.1	19.9	84.0	4.4	0.9	18.1	40.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	85.2	11.1	82.1	19.9	84.0	4.4	0.9	18.1	40.0
Queue Length 50th (m)	23.3	4.0	56.8	23.5	37.3	5.2	0.2	17.4	200.9
Queue Length 95th (m)	40.6	18.7	79.1	48.1	66.4	43.0	0.6	m18.4	m171.6
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	176	598	365	647	244	2614	948	282	2458
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.21	0.57	0.45	0.73	0.52	0.06	0.44	0.89

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	18	109	208	21	269	178	1353	54	125	1978	205
Future Volume (vph)	88	18	109	208	21	269	178	1353	54	125	1978	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1569		1652	1550		1711	4421	1566	1711	4359	
Flt Permitted	0.30	1.00		0.63	1.00		0.05	1.00	1.00	0.12	1.00	
Satd. Flow (perm)	527	1569		1089	1550		87	4421	1566	223	4359	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	88	18	109	208	21	269	178	1353	54	125	1978	205
RTOR Reduction (vph)	0	85	0	0	149	0	0	0	22	0	6	0
Lane Group Flow (vph)	88	42	0	208	141	0	178	1353	32	125	2177	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	31.1	31.1		31.1	31.1		96.9	82.8	82.8	88.9	78.8	
Effective Green, g (s)	31.1	31.1		31.1	31.1		96.9	82.8	82.8	88.9	78.8	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.69	0.59	0.59	0.64	0.56	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	117	348		241	344		223	2614	926	248	2453	
v/s Ratio Prot		0.03			0.09		c0.08	0.31		0.04	c0.50	
v/s Ratio Perm	0.17			c0.19			0.47		0.02	0.28		
v/c Ratio	0.75	0.12		0.86	0.41		0.80	0.52	0.03	0.50	0.89	
Uniform Delay, d1	50.9	43.5		52.4	46.6		44.0	16.8	11.9	11.7	26.7	
Progression Factor	1.00	1.00		1.00	1.00		1.74	0.20	0.17	1.95	1.44	
Incremental Delay, d2	23.5	0.2		25.8	0.8		16.3	0.7	0.1	0.1	0.5	
Delay (s)	74.4	43.7		78.2	47.4		92.7	4.0	2.1	23.0	39.1	
Level of Service	E	D		E	D		F	A	A	C	D	
Approach Delay (s/veh)		56.2			60.2			13.9			38.2	
Approach LOS		E			E			B			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	33.1	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.87				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	97.0%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

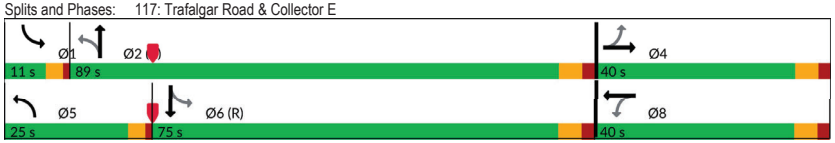
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	8	4	90	8	64	33	1514	36	56	2213	26
Future Volume (vph)	7	8	4	90	8	64	33	1514	36	56	2213	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.950			0.867			0.997			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1789	0	1789	1633	0	1711	4408	0	1711	4412	0
Flt Permitted	0.710			0.750			0.039			0.104		
Satd. Flow (perm)	1337	1789	0	1413	1633	0	70	4408	0	187	4412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			64			4			1	
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	7	8	4	90	8	64	33	1514	36	56	2213	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	12	0	90	72	0	33	1550	0	56	2239	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	14.6	14.6		14.6	14.6		111.7	104.5		113.3	107.0	
Actuated g/C Ratio	0.10	0.10		0.10	0.10		0.80	0.75		0.81	0.76	
v/c Ratio	0.05	0.06		0.61	0.32		0.25	0.47		0.25	0.66	
Control Delay (s/veh)	55.1	42.4		76.5	18.4		23.5	1.6		5.3	8.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.1	
Total Delay (s/veh)	55.1	42.4		76.5	18.4		23.5	1.6		5.3	8.1	
LOS	E	D		E	B		C	A		A	A	
Approach Delay (s/veh)		47.1			50.7			2.0			8.0	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 7.6		Intersection LOS: A	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	7	12	90	72	33	1550	56	2239
v/c Ratio	0.05	0.06	0.61	0.32	0.25	0.47	0.25	0.66
Control Delay (s/veh)	55.1	42.4	76.5	18.4	23.5	1.6	5.3	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay (s/veh)	55.1	42.4	76.5	18.4	23.5	1.6	5.3	8.1
Queue Length 50th (m)	1.8	1.9	24.9	2.0	1.0	12.5	1.8	58.7
Queue Length 95th (m)	m4.8	m6.5	41.4	16.3	m7.1	16.0	m2.6	76.2
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	324	437	343	445	303	3290	228	3372
Starvation Cap Reductn	0	0	0	0	0	0	0	137
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.03	0.26	0.16	0.11	0.47	0.25	0.69

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	8	4	90	8	64	33	1514	36	56	2213	26
Future Volume (vph)	7	8	4	90	8	64	33	1514	36	56	2213	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.95		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1789		1789	1632		1711	4406		1711	4413	
Flt Permitted	0.71	1.00		0.75	1.00		0.04	1.00		0.10	1.00	
Satd. Flow (perm)	1337	1789		1412	1632		69	4406		187	4413	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	7	8	4	90	8	64	33	1514	36	56	2213	26
RTOR Reduction (vph)	0	4	0	0	57	0	0	1	0	0	0	0
Lane Group Flow (vph)	7	8	0	90	15	0	33	1549	0	56	2239	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	14.6	14.6		14.6	14.6		107.6	103.7		111.2	105.5	
Effective Green, g (s)	14.6	14.6		14.6	14.6		107.6	103.7		111.2	105.5	
Actuated g/C Ratio	0.10	0.10		0.10	0.10		0.77	0.74		0.79	0.75	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	139	186		147	170		98	3263		210	3325	
v/s Ratio Prot		0.00			0.01		0.01	0.35		c0.01	c0.51	
v/s Ratio Perm	0.01			c0.06			0.25			0.20		
v/c Ratio	0.05	0.05		0.61	0.09		0.34	0.47		0.27	0.67	
Uniform Delay, d1	56.5	56.4		60.0	56.7		8.5	7.3		4.3	8.6	
Progression Factor	1.02	0.99		1.00	0.97		4.17	0.15		1.42	0.81	
Incremental Delay, d2	0.1	0.1		7.3	0.2		1.8	0.4		0.4	0.6	
Delay (s)	57.6	56.0		67.2	54.9		37.1	1.5		6.5	7.6	
Level of Service	E	E		E	D		D	A		A	A	
Approach Delay (s/veh)		56.6			61.7			2.2			7.5	
Approach LOS		E			E			A			A	

Intersection Summary

HCM 2000 Control Delay (s/veh)	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	7	413	846	104	264	19
Future Volume (vph)	7	413	846	104	264	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.984		0.991	
Flt Protected		0.999			0.955	
Satd. Flow (prot)	0	3418	3367	0	1704	0
Flt Permitted		0.999			0.955	
Satd. Flow (perm)	0	3418	3367	0	1704	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	7	413	846	104	264	19
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	420	950	0	283	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	7	413	846	104	264	19
Future Volume (Veh/h)	7	413	846	104	264	19
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	7	413	846	104	264	19
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	950				1119	475
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	950				1119	475
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				0	96
cM capacity (veh/h)	719				199	536

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	145	275	564	386	283
Volume Left	7	0	0	0	264
Volume Right	0	0	0	104	19
cSH	719	1700	1700	1700	208
Volume to Capacity	0.00*	0.16	0.33	0.23	1.36
Queue Length 95th (m)	0.2	0.0	0.0	0.0	121.9
Control Delay (s/veh)	0.6	0.0	0.0	0.0	235.5
Lane LOS	A				F
Approach Delay (s/veh)	0.2		0.0		235.5
Approach LOS					F

Intersection Summary				
Average Delay		40.4		
Intersection Capacity Utilization		49.1%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	77	188	215	0	0	233
Future Volume (vph)	77	188	215	0	0	233
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.986				
Satd. Flow (prot)	0	3528	3579	0	1629	0
Flt Permitted		0.986				
Satd. Flow (perm)	0	3528	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	77	188	215	0	0	233
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	265	215	0	233	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	37.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	77	188	215	0	0	233
Future Volume (Veh/h)	77	188	215	0	0	233
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	77	188	215	0	0	233
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	215				463	108
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	215				463	108
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				100	75
cM capacity (veh/h)	1352				498	926

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	140	125	143	72	233
Volume Left	77	0	0	0	0
Volume Right	0	0	0	0	233
cSH	1352	1700	1700	1700	926
Volume to Capacity	0.06	0.07	0.08	0.04	0.25
Queue Length 95th (m)	1.4	0.0	0.0	0.0	7.6
Control Delay (s/veh)	4.5	0.0	0.0	0.0	10.2
Lane LOS	A				B
Approach Delay (s/veh)	2.4		0.0		10.2
Approach LOS					B

Intersection Summary				
Average Delay		4.2		
Intersection Capacity Utilization		37.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	188	0	0	0	0	215
Future Volume (vph)	188	0	0	0	0	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			80.2	161.7	
Travel Time (s)	55.9			6.0	12.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	188	0	0	0	0	215
Shared Lane Traffic (%)						
Lane Group Flow (vph)	188	0	0	0	0	215
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	188	0	0	0	0	215
Future Volume (vph)	188	0	0	0	0	215
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	188	0	0	0	0	215

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	188	0	215
Volume Left (vph)	188	0	0
Volume Right (vph)	0	0	215
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	5.5	5.0	3.9
Degree Utilization, x	0.29	0.00	0.23
Capacity (veh/h)	628	717	884
Control Delay (s/veh)	9.5	6.8	8.1
Approach Delay (s/veh)	9.5		8.1
Approach LOS	A		A

Intersection Summary			
Delay	8.7		
Level of Service	A		
Intersection Capacity Utilization	16.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	38	12	0	0	0
Future Volume (vph)	0	38	12	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	70	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	8.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	38	12	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	0	0	12	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	38	12	0	0	0
Future Volume (Veh/h)	0	38	12	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	38	12	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	24	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	24	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	96	99			
cM capacity (veh/h)	985	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	38	12	0
Volume Left	0	12	0
Volume Right	38	0	0
cSH	1085	1623	1700
Volume to Capacity	0.04	0.00*	0.00
Queue Length 95th (m)	0.8	0.2	0.0
Control Delay (s/veh)	8.4	7.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	7.2	0.0
Approach LOS	A		

Intersection Summary				
Average Delay	8.1			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

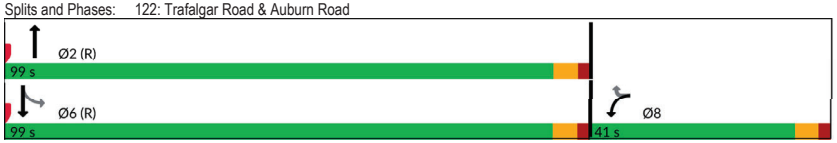
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	73	131	1606	41	60	1819
Future Volume (vph)	73	131	1606	41	60	1819
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.996			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4403	0	1711	4421
Flt Permitted	0.950				0.099	
Satd. Flow (perm)	1789	1601	4403	0	178	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		42	5			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	73	131	1606	41	60	1819
Shared Lane Traffic (%)						
Lane Group Flow (vph)	73	131	1647	0	60	1819
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		6	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		20.0	20.0
Minimum Split (s)	40.0	40.0	40.0		40.0	40.0
Total Split (s)	41.0	41.0	99.0		99.0	99.0
Total Split (%)	29.3%	29.3%	70.7%		70.7%	70.7%
Maximum Green (s)	35.0	35.0	93.0		93.0	93.0
Yellow Time (s)	4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		C-Min	C-Min
Walk Time (s)	7.0	7.0	7.0		7.0	7.0
Flash Don't Walk (s)	9.0	9.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)	0	0	0		0	0
Act Effct Green (s)	14.0	14.0	114.0		114.0	114.0
Actuated g/C Ratio	0.10	0.10	0.81		0.81	0.81
v/c Ratio	0.41	0.66	0.46		0.41	0.51
Control Delay (s/veh)	64.8	56.5	5.8		14.5	5.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	64.8	56.5	5.8		14.5	5.0
LOS	E	E	A		B	A
Approach Delay (s/veh)	59.4		5.8			5.3
Approach LOS	E		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay (s/veh): 8.5		Intersection LOS: A	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	73	131	1647	60	1819
v/c Ratio	0.41	0.66	0.46	0.41	0.51
Control Delay (s/veh)	64.8	56.5	5.8	14.5	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	64.8	56.5	5.8	14.5	5.0
Queue Length 50th (m)	19.7	24.5	95.1	3.8	53.5
Queue Length 95th (m)	34.3	44.5	16.2	17.3	81.8
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	447	431	3585	145	3599
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.30	0.46	0.41	0.51

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	73	131	1606	41	60	1819
Future Volume (vph)	73	131	1606	41	60	1819
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4404		1711	4421
Flt Permitted	0.95	1.00	1.00		0.10	1.00
Satd. Flow (perm)	1789	1601	4404		178	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	73	131	1606	41	60	1819
RTOR Reduction (vph)	0	38	1	0	0	0
Lane Group Flow (vph)	73	93	1646	0	60	1819
Turn Type	Prot	Perm	NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases		8			6	
Actuated Green, G (s)	14.0	14.0	114.0		114.0	114.0
Effective Green, g (s)	14.0	14.0	114.0		114.0	114.0
Actuated g/C Ratio	0.10	0.10	0.81		0.81	0.81
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	178	160	3586		144	3599
v/s Ratio Prot	0.04		0.37			c0.41
v/s Ratio Perm		c0.06			0.34	
v/c Ratio	0.41	0.58	0.46		0.42	0.51
Uniform Delay, d1	59.1	60.2	3.9		3.7	4.1
Progression Factor	1.00	1.00	1.31		1.00	1.00
Incremental Delay, d2	1.5	5.3	0.3		8.6	0.5
Delay (s)	60.7	65.5	5.4		12.3	4.6
Level of Service	E	E	A		B	A
Approach Delay (s/veh)	63.8		5.4			4.9
Approach LOS	E		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	39	13	12	38	0
Future Volume (vph)	0	39	13	12	38	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.975		
Satd. Flow (prot)	1629	0	0	1836	1883	0
Flt Permitted				0.975		
Satd. Flow (perm)	1629	0	0	1836	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	39	13	12	38	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	25	38	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	39	13	12	38	0
Future Volume (Veh/h)	0	39	13	12	38	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	39	13	12	38	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	76	38	38			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	76	38	38			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	96	99			
cM capacity (veh/h)	920	1034	1572			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	39	25	38
Volume Left	0	13	0
Volume Right	39	0	0
cSH	1034	1572	1700
Volume to Capacity	0.04	0.00*	0.02
Queue Length 95th (m)	0.9	0.2	0.0
Control Delay (s/veh)	8.6	3.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.6	3.8	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		4.2		
Intersection Capacity Utilization		18.0%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	98	26	47	23	33
Future Volume (vph)	17	98	26	47	23	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.885		0.913			
Flt Protected	0.993					0.980
Satd. Flow (prot)	1582	0	1644	0	0	1765
Flt Permitted	0.993					0.980
Satd. Flow (perm)	1582	0	1644	0	0	1765
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	98	26	47	23	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	115	0	73	0	0	56
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	17	98	26	47	23	33
Future Volume (Veh/h)	17	98	26	47	23	33
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	17	98	26	47	23	33
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	129	50			73	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	129	50			73	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	90			98	
cM capacity (veh/h)	853	1019			1527	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	115	73	56
Volume Left	17	0	23
Volume Right	98	47	0
cSH	990	1700	1527
Volume to Capacity	0.12	0.04	0.02
Queue Length 95th (m)	3.0	0.0	0.3
Control Delay (s/veh)	9.1	0.0	3.1
Lane LOS	A		A
Approach Delay (s/veh)	9.1	0.0	3.1
Approach LOS	A		

Intersection Summary					
Average Delay		5.0			
Intersection Capacity Utilization		23.3%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	84	14	85	214	4	27	29	64	44	5	0
Future Volume (vph)	0	84	14	85	214	4	27	29	64	44	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981			0.998			0.928				
Flt Protected					0.986			0.989			0.957	
Satd. Flow (prot)	0	1848	0	0	1772	0	0	1729	0	0	1802	0
Flt Permitted					0.986			0.989			0.957	
Satd. Flow (perm)	0	1848	0	0	1772	0	0	1729	0	0	1802	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	84	14	85	214	4	27	29	64	44	5	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	98	0	0	303	0	0	120	0	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary				
Area Type:	Other			
Control Type: Unsignalized				
Intersection Capacity Utilization 38.0%		ICU Level of Service A		
Analysis Period (min) 15				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	84	14	85	214	4	27	29	64	44	5	0
Future Volume (Veh/h)	0	84	14	85	214	4	27	29	64	44	5	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	84	14	85	214	4	27	29	64	44	5	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	218			98			480	479	91	556	484	216
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	218			98			480	479	91	556	484	216
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			94			94	94	93	88	99	100
cM capacity (veh/h)	1352			1495			471	458	967	376	455	824

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	98	303	120	49
Volume Left	0	85	27	44
Volume Right	14	4	64	0
cSH	1352	1495	642	383
Volume to Capacity	0.00	0.06	0.19	0.13
Queue Length 95th (m)	0.0	1.4	5.2	3.3
Control Delay (s/veh)	0.0	2.5	11.9	15.8
Lane LOS		A	B	C
Approach Delay (s/veh)	0.0	2.5	11.9	15.8
Approach LOS			B	C

Intersection Summary				
Average Delay		5.2		
Intersection Capacity Utilization		38.0%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	93	54	30	312	76	41
Future Volume (vph)	93	54	30	312	76	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.950				0.953	
Flt Protected				0.996	0.969	
Satd. Flow (prot)	1789	0	0	1876	1739	0
Flt Permitted				0.996	0.969	
Satd. Flow (perm)	1789	0	0	1876	1739	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	93	54	30	312	76	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	147	0	0	342	117	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		97	97		97	97
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	3	7	66	9	4	46
Future Volume (vph)	3	7	66	9	4	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.905		0.984			
Flt Protected	0.985					0.996
Satd. Flow (prot)	1550	0	1772	0	0	1793
Flt Permitted	0.985					0.996
Satd. Flow (perm)	1550	0	1772	0	0	1793
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	3	7	66	9	4	46
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	0	75	0	0	50
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	3	7	66	9	4	46
Future Volume (Veh/h)	3	7	66	9	4	46
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	7	66	9	4	46
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	125	71			75	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	125	71			75	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	868	992			1524	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	10	75	50
Volume Left	3	0	4
Volume Right	7	9	0
cSH	951	1700	1524
Volume to Capacity	0.01	0.04	0.00*
Queue Length 95th (m)	0.2	0.0	0.1
Control Delay (s/veh)	8.8	0.0	0.6
Lane LOS	A		A
Approach Delay (s/veh)	8.8	0.0	0.6
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	15.7%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	11	8	8	37	19	11	99	11	13	89	2
Future Volume (vph)	2	11	8	8	37	19	11	99	11	13	89	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.949			0.960			0.988			0.997	
Flt Protected		0.995			0.994			0.995			0.994	
Satd. Flow (prot)	0	1642	0	0	1659	0	0	1770	0	0	1784	0
Flt Permitted		0.995			0.994			0.995			0.994	
Satd. Flow (perm)	0	1642	0	0	1659	0	0	1770	0	0	1784	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	2	11	8	8	37	19	11	99	11	13	89	2
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	21	0	0	64	0	0	121	0	0	104	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	11	8	8	37	19	11	99	11	13	89	2
Future Volume (Veh/h)	2	11	8	8	37	19	11	99	11	13	89	2
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	11	8	8	37	19	11	99	11	13	89	2
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	280	248	90	256	244	105	91			110		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	280	248	90	256	244	105	91			110		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	99	94	98	99			99		
cM capacity (veh/h)	622	644	968	674	648	950	1504			1480		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	21	64	121	104
Volume Left	2	8	11	13
Volume Right	8	19	11	2
cSH	735	719	1504	1480
Volume to Capacity	0.03	0.09	0.00*	0.00*
Queue Length 95th (m)	0.7	2.2	0.2	0.2
Control Delay (s/veh)	10.0	10.5	0.7	1.0
Lane LOS	B	B	A	A
Approach Delay (s/veh)	10.0	10.5	0.7	1.0
Approach LOS	B	B		

Intersection Summary					
Average Delay		3.5			
Intersection Capacity Utilization		19.8%	ICU Level of Service		A
Analysis Period (min)		15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	29	4	0	55	0	71	147	9	0	89	23
Future Volume (vph)	9	29	4	0	55	0	71	147	9	0	89	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987						0.995			0.972	
Flt Protected		0.989						0.985				
Satd. Flow (prot)	0	1839	0	0	1883	0	0	1765	0	0	1750	0
Flt Permitted		0.989						0.985				
Satd. Flow (perm)	0	1839	0	0	1883	0	0	1765	0	0	1750	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	29	4	0	55	0	71	147	9	0	89	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	42	0	0	55	0	0	227	0	0	112	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	97		97	24		97	97		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary				
Area Type:	Other			
Control Type: Unsignalized				
Intersection Capacity Utilization 34.5%		ICU Level of Service A		
Analysis Period (min) 15				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	29	4	0	55	0	71	147	9	0	89	23
Future Volume (Veh/h)	9	29	4	0	55	0	71	147	9	0	89	23
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	9	29	4	0	55	0	71	147	9	0	89	23
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	422	399	101	413	406	152	112			156		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	422	399	101	413	406	152	112			156		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	94	100	100	89	100	95			100		
cM capacity (veh/h)	480	513	955	505	509	895	1478			1424		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	42	55	227	112
Volume Left	9	0	71	0
Volume Right	4	0	9	23
cSH	529	509	1478	1424
Volume to Capacity	0.08	0.11	0.05	0.00
Queue Length 95th (m)	2.0	2.7	1.1	0.0
Control Delay (s/veh)	12.4	12.9	2.6	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	12.4	12.9	2.6	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay		4.2		
Intersection Capacity Utilization		34.5%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	33	2	0	37	11	4	44	15	8	23	18
Future Volume (vph)	20	33	2	0	37	11	4	44	15	8	23	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.969			0.968			0.950	
Flt Protected		0.982						0.997			0.992	
Satd. Flow (prot)	0	1699	0	0	1745	0	0	1738	0	0	1697	0
Flt Permitted		0.982						0.997			0.992	
Satd. Flow (perm)	0	1699	0	0	1745	0	0	1738	0	0	1697	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	33	2	0	37	11	4	44	15	8	23	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	55	0	0	48	0	0	63	0	0	49	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	33	2	0	37	11	4	44	15	8	23	18
Future Volume (Veh/h)	20	33	2	0	37	11	4	44	15	8	23	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	33	2	0	37	11	4	44	15	8	23	18
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	137	115	32	126	117	52	41			59		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	137	115	32	126	117	52	41			59		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	96	100	100	95	99	100			99		
cM capacity (veh/h)	790	769	1042	814	768	1016	1568			1545		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	55	48	63	49
Volume Left	20	0	4	8
Volume Right	2	11	15	18
cSH	784	813	1568	1545
Volume to Capacity	0.07	0.06	0.00*	0.00*
Queue Length 95th (m)	1.7	1.4	0.1	0.1
Control Delay (s/veh)	9.9	9.7	0.5	1.2
Lane LOS	A	A	A	A
Approach Delay (s/veh)	9.9	9.7	0.5	1.2
Approach LOS	A	A		

Intersection Summary				
Average Delay		5.1		
Intersection Capacity Utilization		21.3%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	63	0	7	72	95	6	21	5	85	15	5
Future Volume (vph)	5	63	0	7	72	95	6	21	5	85	15	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.926			0.979			0.994	
Flt Protected		0.996			0.998			0.991			0.961	
Satd. Flow (prot)	0	1793	0	0	1664	0	0	1747	0	0	1720	0
Flt Permitted		0.996			0.998			0.991			0.961	
Satd. Flow (perm)	0	1793	0	0	1664	0	0	1747	0	0	1720	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	63	0	7	72	95	6	21	5	85	15	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	0	0	174	0	0	32	0	0	105	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	30.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	63	0	7	72	95	6	21	5	85	15	5
Future Volume (Veh/h)	5	63	0	7	72	95	6	21	5	85	15	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	63	0	7	72	95	6	21	5	85	15	5
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	167			63			219	254	63	222	207	120
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	167			63			219	254	63	222	207	120
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	97	100	88	98	99
cM capacity (veh/h)	1411			1540			716	644	1002	708	685	932

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	68	174	32	105
Volume Left	5	7	6	85
Volume Right	0	95	5	5
cSH	1411	1540	696	712
Volume to Capacity	0.00*	0.00*	0.05	0.15
Queue Length 95th (m)	0.1	0.1	1.1	3.9
Control Delay (s/veh)	0.6	0.3	10.4	10.9
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.6	0.3	10.4	10.9
Approach LOS			B	B

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	30.7%	ICU Level of Service		A
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	166	53	61	66	67	36
Future Volume (vph)	166	53	61	66	67	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.967				0.953	
Flt Protected	0.963			0.977		
Satd. Flow (prot)	1677	0	0	1759	1716	0
Flt Permitted	0.963			0.977		
Satd. Flow (perm)	1677	0	0	1759	1716	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	166	53	61	66	67	36
Shared Lane Traffic (%)						
Lane Group Flow (vph)	219	0	0	127	103	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	32.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	166	53	61	66	67	36
Future Volume (Veh/h)	166	53	61	66	67	36
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	166	53	61	66	67	36
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	273	85	103			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	273	85	103			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	76	95	96			
cM capacity (veh/h)	687	974	1489			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	219	127	103
Volume Left	166	61	0
Volume Right	53	0	36
cSH	740	1489	1700
Volume to Capacity	0.30	0.04	0.06
Queue Length 95th (m)	9.4	1.0	0.0
Control Delay (s/veh)	11.9	3.8	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	11.9	3.8	0.0
Approach LOS	B		

Intersection Summary				
Average Delay		6.9		
Intersection Capacity Utilization		32.6%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	22	15	6	15	0
Future Volume (vph)	0	22	15	6	15	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.966		
Satd. Flow (prot)	1629	0	0	1819	1883	0
Flt Permitted				0.966		
Satd. Flow (perm)	1629	0	0	1819	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	278.5	
Travel Time (s)	16.7			24.3	14.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	22	15	6	15	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	22	0	0	21	15	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	22	15	6	15	0
Future Volume (Veh/h)	0	22	15	6	15	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	22	15	6	15	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	51	15	15			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	51	15	15			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	949	1065	1603			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	22	21	15
Volume Left	0	15	0
Volume Right	22	0	0
cSH	1065	1603	1700
Volume to Capacity	0.02	0.00*	0.00*
Queue Length 95th (m)	0.5	0.2	0.0
Control Delay (s/veh)	8.5	5.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	5.2	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		5.1		
Intersection Capacity Utilization		17.8%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	36	49	0	36	21	12
Future Volume (vph)	36	49	0	36	21	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.922				0.951	
Flt Protected					0.969	
Satd. Flow (prot)	1660	0	0	1801	1659	0
Flt Permitted					0.969	
Satd. Flow (perm)	1660	0	0	1801	1659	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	36	49	0	36	21	12
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	0	0	36	33	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	36	49	0	36	21	12
Future Volume (Veh/h)	36	49	0	36	21	12
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	36	49	0	36	21	12
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	54	0	115	48	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	54	0	115	48	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	96	95	100	96	99	
cM capacity (veh/h)	826	1085	788	833	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	85	36	33
Volume Left	0	0	21
Volume Right	49	0	12
cSH	958	833	1623
Volume to Capacity	0.09	0.04	0.01
Queue Length 95th (m)	2.2	1.0	0.3
Control Delay (s/veh)	9.1	9.5	4.6
Lane LOS	A	A	A
Approach Delay (s/veh)	9.1	9.5	4.6
Approach LOS	A	A	

Intersection Summary				
Average Delay	8.3			
Intersection Capacity Utilization	14.9%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	3	28	41	83	28	3
Future Volume (vph)	3	28	41	83	28	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.878				0.987	
Flt Protected	0.995			0.984		
Satd. Flow (prot)	1519	0	0	1772	1777	0
Flt Permitted	0.995			0.984		
Satd. Flow (perm)	1519	0	0	1772	1777	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	3	28	41	83	28	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	0	0	124	31	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	28	41	83	28	3
Future Volume (Veh/h)	3	28	41	83	28	3
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	3	28	41	83	28	3
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	195	30	31			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	195	30	31			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	97			
cM capacity (veh/h)	774	1045	1582			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	31	124	31
Volume Left	3	41	0
Volume Right	28	0	3
cSH	1011	1582	1700
Volume to Capacity	0.03	0.03	0.02
Queue Length 95th (m)	0.7	0.6	0.0
Control Delay (s/veh)	8.7	2.6	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.7	2.6	0.0
Approach LOS	A		

Intersection Summary					
Average Delay		3.2			
Intersection Capacity Utilization		23.3%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	32	131	281	123	84	84
Future Volume (vph)	32	131	281	123	84	84
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.959		0.932	
Flt Protected		0.990			0.976	
Satd. Flow (prot)	0	1783	1727	0	1581	0
Flt Permitted		0.990			0.976	
Satd. Flow (perm)	0	1783	1727	0	1581	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	32	131	281	123	84	84
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	163	404	0	168	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	32	131	281	123	84	84
Future Volume (Veh/h)	32	131	281	123	84	84
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	32	131	281	123	84	84
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.96				0.96	0.96
vC, conflicting volume	404				538	343
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	358				497	294
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				83	88
cM capacity (veh/h)	1152				497	715

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	163	404	168
Volume Left	32	0	84
Volume Right	0	123	84
cSH	1152	1700	586
Volume to Capacity	0.03	0.24	0.29
Queue Length 95th (m)	0.7	0.0	9.0
Control Delay (s/veh)	1.8	0.0	13.6
Lane LOS	A		B
Approach Delay (s/veh)	1.8	0.0	13.6
Approach LOS			B

Intersection Summary			
Average Delay		3.5	
Intersection Capacity Utilization		50.7%	ICU Level of Service A
Analysis Period (min)		15	

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	33	39	14	130	9	7
Future Volume (vph)	33	39	14	130	9	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.927				0.941	
Flt Protected				0.995	0.973	
Satd. Flow (prot)	1612	0	0	1730	1649	0
Flt Permitted				0.995	0.973	
Satd. Flow (perm)	1612	0	0	1730	1649	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	33	39	14	130	9	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	72	0	0	144	16	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	33	39	14	130	9	7
Future Volume (Veh/h)	33	39	14	130	9	7
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	33	39	14	130	9	7
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	25	0	77	22	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	25	0	77	22	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	96	96	98	85	99	
cM capacity (veh/h)	863	1085	850	867	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	72	144	16
Volume Left	0	14	9
Volume Right	39	0	7
cSH	971	866	1623
Volume to Capacity	0.07	0.17	0.00*
Queue Length 95th (m)	1.8	4.5	0.1
Control Delay (s/veh)	9.0	10.0	4.1
Lane LOS	A	A	A
Approach Delay (s/veh)	9.0	10.0	4.1
Approach LOS	A	A	

Intersection Summary				
Average Delay		9.3		
Intersection Capacity Utilization		24.3%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	74	271	31	32	4	137	8	142	3	0	14
Future Volume (vph)	46	74	271	31	32	4	137	8	142	3	0	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.906			0.992			0.933			0.889	
Flt Protected		0.994			0.977			0.977			0.991	
Satd. Flow (prot)	0	1622	0	0	1745	0	0	1641	0	0	1586	0
Flt Permitted		0.994			0.977			0.977			0.991	
Satd. Flow (perm)	0	1622	0	0	1745	0	0	1641	0	0	1586	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	46	74	271	31	32	4	137	8	142	3	0	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	391	0	0	67	0	0	287	0	0	17	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	74	271	31	32	4	137	8	142	3	0	14
Future Volume (Veh/h)	46	74	271	31	32	4	137	8	142	3	0	14
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	46	74	271	31	32	4	137	8	142	3	0	14
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked												
vC, conflicting volume	36			345			412	400	210	544	533	34
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	36			345			412	400	210	544	533	34
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			97			74	98	83	99	100	99
cM capacity (veh/h)	1575			1214			521	510	831	354	428	1039

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	391	67	287	17
Volume Left	46	31	137	3
Volume Right	271	4	142	14
cSH	1575	1214	638	774
Volume to Capacity	0.03	0.03	0.45	0.02
Queue Length 95th (m)	0.7	0.6	17.7	0.5
Control Delay (s/veh)	1.1	3.8	15.2	9.8
Lane LOS	A	A	C	A
Approach Delay (s/veh)	1.1	3.8	15.2	9.8
Approach LOS			C	A

Intersection Summary					
Average Delay		6.8			
Intersection Capacity Utilization		53.6%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	10	63	25	0
Future Volume (vph)	0	1	10	63	25	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.993		
Satd. Flow (prot)	1504	0	0	1788	1801	0
Flt Permitted				0.993		
Satd. Flow (perm)	1504	0	0	1788	1801	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1	10	63	25	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1	0	0	73	25	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1	10	63	25	0
Future Volume (Veh/h)	0	1	10	63	25	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1	10	63	25	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	108	25	25			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	108	25	25			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	884	1051	1589			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	1	73	25
Volume Left	0	10	0
Volume Right	1	0	0
cSH	1051	1589	1700
Volume to Capacity	0.00*	0.00*	0.01
Queue Length 95th (m)	0.0	0.1	0.0
Control Delay (s/veh)	8.4	1.0	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	1.0	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		0.9		
Intersection Capacity Utilization		20.5%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	70	70	0	0	23	31	23	0	93	0
Future Volume (vph)	0	0	70	70	0	0	23	31	23	0	93	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.960				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1781	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	70	70	0	0	23	31	23	0	93	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	0	0	70	0	0	77	0	0	93	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	28.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	70	70	0	0	23	31	23	0	93	0
Future Volume (Veh/h)	0	0	70	70	0	0	23	31	23	0	93	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	70	70	0	0	23	31	23	0	93	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			70			222	175	35	214	210	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			70			222	175	35	214	210	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			96	95	98	100	86	100
cM capacity (veh/h)	1623			1531			632	686	1038	677	656	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	70	70	77	93
Volume Left	0	70	23	0
Volume Right	70	0	23	0
cSH	1623	1531	742	656
Volume to Capacity	0.00	0.05	0.10	0.14
Queue Length 95th (m)	0.0	1.1	2.6	3.7
Control Delay (s/veh)	0.0	7.5	10.4	11.4
Lane LOS		A	B	B
Approach Delay (s/veh)	0.0	7.5	10.4	11.4
Approach LOS			B	B

Intersection Summary				
Average Delay	7.7			
Intersection Capacity Utilization	28.2%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	24	8	21	37	0
Future Volume (vph)	0	24	8	21	37	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.986		
Satd. Flow (prot)	1629	0	0	1857	1883	0
Flt Permitted				0.986		
Satd. Flow (perm)	1629	0	0	1857	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			32.9	35.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	24	8	21	37	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	0	0	29	37	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	24	8	21	37	0
Future Volume (Veh/h)	0	24	8	21	37	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	24	8	21	37	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	74	37	37			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	74	37	37			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	99			
cM capacity (veh/h)	925	1035	1574			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	24	29	37
Volume Left	0	8	0
Volume Right	24	0	0
cSH	1035	1574	1700
Volume to Capacity	0.02	0.00*	0.02
Queue Length 95th (m)	0.5	0.1	0.0
Control Delay (s/veh)	8.6	2.0	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.6	2.0	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		2.9		
Intersection Capacity Utilization		18.1%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

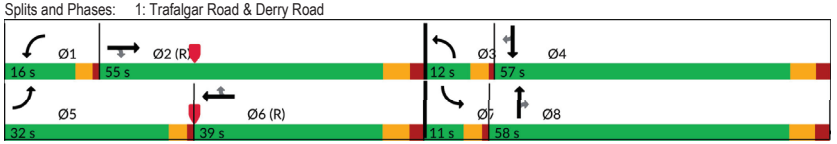
2051 Future Total

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1029	1800	391	416	622	287	182	2069	484	148	1495	119
Future Volume (vph)	1029	1800	391	416	622	287	182	2069	484	148	1495	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			113			123			211			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	1050	1837	399	424	635	293	186	2111	494	151	1526	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1050	1837	399	424	635	293	186	2111	494	151	1526	121
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	32.0	55.0	55.0	16.0	39.0	39.0	12.0	58.0	58.0	11.0	57.0	57.0
Total Split (%)	22.9%	39.3%	39.3%	11.4%	27.9%	27.9%	8.6%	41.4%	41.4%	7.9%	40.7%	40.7%
Maximum Green (s)	28.0	48.1	48.1	12.0	32.1	32.1	8.0	51.2	51.2	7.0	50.2	50.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	29.0	50.1	50.1	13.0	34.1	34.1	9.0	53.2	53.2	8.0	52.2	52.2
Actuated g/C Ratio	0.21	0.36	0.36	0.09	0.24	0.24	0.06	0.38	0.38	0.06	0.37	0.37
v/c Ratio	1.46	1.00	0.62	1.32	0.53	0.60	0.95	1.33	0.68	0.91	0.97	0.22
Control Delay (s/veh)	259.2	61.1	34.5	211.8	47.2	31.5	99.1	183.9	21.1	93.5	53.9	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	259.2	61.1	34.5	211.8	47.2	31.5	99.1	183.9	21.1	93.5	53.9	9.9
LOS	F	E	C	F	D	C	F	F	C	F	D	A
Approach Delay (s/veh)		121.2			95.4			149.4			54.3	
Approach LOS		F			F			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.46			
Intersection Signal Delay (s/veh): 112.9		Intersection LOS: F	
Intersection Capacity Utilization 107.2%		ICU Level of Service G	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1050	1837	399	424	635	293	186	2111	494	151	1526	121
v/c Ratio	1.46	1.00	0.62	1.32	0.53	0.60	0.95	1.33	0.68	0.91	0.97	0.22
Control Delay (s/veh)	259.2	61.1	34.5	211.8	47.2	31.5	99.1	183.9	21.1	93.5	53.9	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	259.2	61.1	34.5	211.8	47.2	31.5	99.1	183.9	21.1	93.5	53.9	9.9
Queue Length 50th (m)	~214.1	175.3	60.1	~79.5	59.9	37.0	29.7	~333.2	50.4	22.3	188.0	15.6
Queue Length 95th (m)	m#227.9	m#210.2	m64.9	#114.6	58.7	51.1	m29.3	m#304.9	m46.0	#46.6	#225.5	m30.2
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	718	1840	639	322	1193	490	196	1586	725	166	1571	550
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.46	1.00	0.62	1.32	0.53	0.60	0.95	1.33	0.68	0.91	0.97	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1029	1800	391	416	622	287	182	2069	484	148	1495	119
Future Volume (vph)	1029	1800	391	416	622	287	182	2069	484	148	1495	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1050	1837	399	424	635	293	186	2111	494	151	1526	121
RTOR Reduction (vph)	0	0	73	0	0	93	0	0	131	0	0	76
Lane Group Flow (vph)	1050	1837	326	424	635	200	186	2111	363	151	1526	45
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	28.0	48.1	48.1	12.0	32.1	32.1	8.0	51.2	51.2	7.0	50.2	50.2
Effective Green, g (s)	29.0	50.1	50.1	13.0	34.1	34.1	9.0	53.2	53.2	8.0	52.2	52.2
Actuated g/C Ratio	0.21	0.36	0.36	0.09	0.24	0.24	0.06	0.38	0.38	0.06	0.37	0.37
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	718	1840	567	322	1193	397	196	1586	595	166	1571	472
v/s Ratio Prot	c0.30	c0.36		0.12	0.13		c0.06	c0.51		0.05	0.36	
v/s Ratio Perm			0.21			0.12			0.23			0.04
v/c Ratio	1.46	1.00	0.58	1.32	0.53	0.50	0.95	1.33	0.61	0.91	0.97	0.10
Uniform Delay, d1	55.5	44.9	36.4	63.5	46.0	45.7	65.3	43.4	35.0	65.6	43.2	28.5
Progression Factor	1.37	1.11	1.25	1.08	0.99	0.99	1.23	0.92	0.98	0.77	0.91	2.02
Incremental Delay, d2	210.7	11.8	1.4	161.6	1.6	4.2	20.6	150.1	0.7	39.3	14.1	0.1
Delay (s)	286.8	61.6	46.7	229.9	47.0	49.3	100.8	190.1	35.0	89.7	53.5	57.9
Level of Service	F	E	D	F	D	D	F	F	C	F	D	E
Approach Delay (s/veh)		131.8			104.9			156.7			56.8	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	120.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	107.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

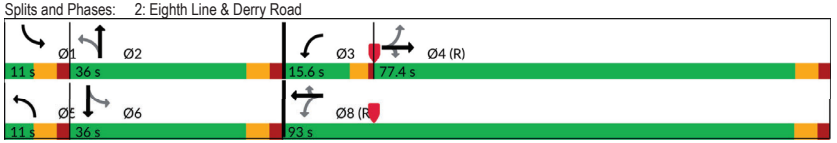
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	1861	132	94	1128	28	153	38	80	11	13	13
Future Volume (vph)	44	1861	132	94	1128	28	153	38	80	11	13	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.899			0.925	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1660	0	1217	1638	0
Flt Permitted	0.193			0.044			0.433			0.678		
Satd. Flow (perm)	261	4520	1601	85	4391	1633	832	1660	0	868	1638	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		68			14	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Adj. Flow (vph)	46	1939	138	98	1175	29	159	40	83	11	14	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	46	1939	138	98	1175	29	159	123	0	11	28	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.5	36.0	36.0	11.0	36.0		11.0	36.0	
Total Split (s)	77.4	77.4	77.4	15.6	93.0	93.0	11.0	36.0		11.0	36.0	
Total Split (%)	55.3%	55.3%	55.3%	11.1%	66.4%	66.4%	7.9%	25.7%		7.9%	25.7%	
Maximum Green (s)	71.4	71.4	71.4	11.6	87.0	87.0	5.0	30.0		5.0	30.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0		23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0			0	
Act Effct Green (s)	90.6	90.6	90.6	105.8	103.8	103.8	23.0	19.4		13.3	11.3	
Actuated g/C Ratio	0.65	0.65	0.65	0.76	0.74	0.74	0.16	0.14		0.10	0.08	
v/c Ratio	0.27	0.66	0.13	0.55	0.36	0.02	0.69	0.43		0.11	0.19	
Control Delay (s/veh)	17.5	17.1	5.4	32.2	7.6	0.0	55.5	24.3		47.4	39.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	17.5	17.1	5.4	32.2	7.6	0.0	55.5	24.3		47.4	39.0	
LOS	B	B	A	C	A	A	E	C		D	D	
Approach Delay (s/veh)		16.4			9.3			41.9			41.4	
Approach LOS		B			A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay (s/veh): 16.1		Intersection LOS: B	
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	46	1939	138	98	1175	29	159	123	11	28
v/c Ratio	0.27	0.66	0.13	0.55	0.36	0.02	0.69	0.43	0.11	0.19
Control Delay (s/veh)	17.5	17.1	5.4	32.2	7.6	0.0	55.5	24.3	47.4	39.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.5	17.1	5.4	32.2	7.6	0.0	55.5	24.3	47.4	39.0
Queue Length 50th (m)	7.9	177.2	9.9	10.8	58.5	0.0	43.1	19.3	3.3	3.8
Queue Length 95th (m)	m16.3	257.4	m17.3	28.2	57.5	0.0	#91.3	39.0	11.4	13.3
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	169	2926	1072	210	3255	1228	231	418	96	362
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.66	0.13	0.47	0.36	0.02	0.69	0.29	0.11	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	1861	132	94	1128	28	153	38	80	11	13	13
Future Volume (vph)	44	1861	132	94	1128	28	153	38	80	11	13	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1660		1217	1638	
Flt Permitted	0.19	1.00	1.00	0.04	1.00	1.00	0.43	1.00		0.68	1.00	
Satd. Flow (perm)	261	4520	1601	84	4391	1633	832	1660		868	1638	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	46	1939	138	98	1175	29	159	40	83	11	14	14
RTOR Reduction (vph)	0	0	38	0	0	8	0	59	0	0	13	0
Lane Group Flow (vph)	46	1939	100	98	1175	21	159	64	0	11	15	0
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	87.0	87.0	87.0	100.2	100.2	100.2	27.8	19.4		10.9	8.5	
Effective Green, g (s)	87.0	87.0	87.0	100.2	100.2	100.2	27.8	19.4		10.9	8.5	
Actuated g/C Ratio	0.62	0.62	0.62	0.72	0.72	0.72	0.20	0.14		0.08	0.06	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	162	2808	994	174	3142	1168	259	230		73	99	
v/s Ratio Prot		c0.43		c0.04	0.27		c0.06	0.04		0.00	0.01	
v/s Ratio Perm	0.18		0.06	0.36		0.01	c0.06			0.01		
v/c Ratio	0.28	0.69	0.10	0.56	0.37	0.02	0.61	0.28		0.15	0.15	
Uniform Delay, d1	12.2	17.6	10.7	25.4	7.7	5.7	49.4	54.0		60.1	62.3	
Progression Factor	0.99	0.96	1.30	1.00	1.00	1.00	0.74	0.77		1.00	1.00	
Incremental Delay, d2	2.7	0.9	0.1	4.1	0.3	0.0	4.2	0.7		1.0	0.7	
Delay (s)	14.7	17.7	14.0	29.5	8.1	5.8	40.7	42.3		61.0	63.0	
Level of Service	B	B	B	C	A	A	D	D		E	E	
Approach Delay (s/veh)		17.4			9.6			41.4			62.5	
Approach LOS		B			A			D			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

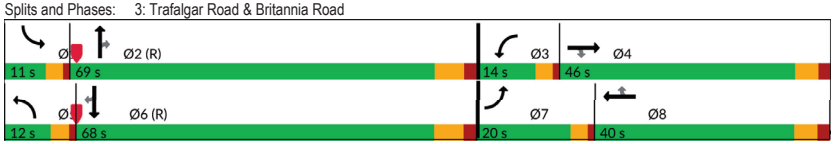
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	539	987	504	230	410	129	238	1961	293	105	2320	349
Future Volume (vph)	539	987	504	230	410	129	238	1961	293	105	2320	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			125			174			328
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	544	997	509	232	414	130	240	1981	296	106	2343	353
Shared Lane Traffic (%)												
Lane Group Flow (vph)	544	997	509	232	414	130	240	1981	296	106	2343	353
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	20.0	46.0	46.0	14.0	40.0	40.0	12.0	69.0	69.0	11.0	68.0	68.0
Total Split (%)	14.3%	32.9%	32.9%	10.0%	28.6%	28.6%	8.6%	49.3%	49.3%	7.9%	48.6%	48.6%
Maximum Green (s)	16.0	40.0	40.0	10.0	34.0	34.0	8.0	62.0	62.0	7.0	61.0	61.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	17.0	41.5	41.5	11.0	35.5	35.5	9.5	64.4	64.4	8.1	63.0	63.0
Actuated g/C Ratio	0.12	0.30	0.30	0.08	0.25	0.25	0.07	0.46	0.46	0.06	0.45	0.45
v/c Ratio	1.33	0.75	0.96	0.84	0.37	0.26	1.24	1.01	0.36	0.63	1.21	0.44
Control Delay (s/veh)	210.4	48.7	68.2	89.9	31.9	7.7	161.0	59.7	23.8	80.9	127.3	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	210.4	48.7	68.2	89.9	31.9	7.7	161.0	59.7	23.8	80.9	127.3	4.4
LOS	F	D	E	F	C	A	F	E	C	F	F	A
Approach Delay (s/veh)		96.5			45.2			65.1			110.0	
Approach LOS		F			D			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay (s/veh): 86.6		Intersection LOS: F	
Intersection Capacity Utilization 93.7%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	544	997	509	232	414	130	240	1981	296	106	2343	353
v/c Ratio	1.33	0.75	0.96	0.84	0.37	0.26	1.24	1.01	0.36	0.63	1.21	0.44
Control Delay (s/veh)	210.4	48.7	68.2	89.9	31.9	7.7	161.0	59.7	23.8	80.9	127.3	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	210.4	48.7	68.2	89.9	31.9	7.7	161.0	59.7	23.8	80.9	127.3	4.4
Queue Length 50th (m)	~104.4	106.2	120.6	20.5	41.6	12.5	~49.7	~199.3	39.0	15.7	~348.2	18.2
Queue Length 95th (m)	#141.7	125.9	#193.2	#50.6	54.3	27.2	m#45.2	m178.6	m34.5	m18.6	m#346.0	m20.4
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	409	1342	537	275	1139	512	193	1956	814	167	1932	794
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.33	0.74	0.95	0.84	0.36	0.25	1.24	1.01	0.36	0.63	1.21	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	539	987	504	230	410	129	238	1961	293	105	2320	349
Future Volume (vph)	539	987	504	230	410	129	238	1961	293	105	2320	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	544	997	509	232	414	130	240	1981	296	106	2343	353
RTOR Reduction (vph)	0	0	71	0	0	93	0	0	94	0	0	180
Lane Group Flow (vph)	544	997	438	232	414	37	240	1981	202	106	2343	173
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	16.0	39.5	39.5	10.0	33.5	33.5	8.5	62.4	62.4	7.1	61.0	61.0
Effective Green, g (s)	17.0	41.5	41.5	11.0	35.5	35.5	9.5	64.4	64.4	8.1	63.0	63.0
Actuated g/C Ratio	0.12	0.30	0.30	0.08	0.25	0.25	0.07	0.46	0.46	0.06	0.45	0.45
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	409	1326	460	275	1124	414	194	1956	720	167	1932	614
v/s Ratio Prot	c0.16	0.22		0.07	0.09		c0.08	0.47		0.04	c0.55	
v/s Ratio Perm			c0.28			0.02			0.13			0.13
v/c Ratio	1.33	0.75	0.95	0.84	0.37	0.09	1.24	1.01	0.28	0.63	1.21	0.28
Uniform Delay, d1	61.5	44.6	48.3	63.7	43.0	39.9	65.3	37.8	23.4	64.5	38.5	24.2
Progression Factor	1.00	1.00	1.00	1.02	0.72	0.88	0.93	1.36	2.45	1.10	0.76	1.03
Incremental Delay, d2	164.5	2.5	29.9	20.0	0.2	0.1	110.9	9.7	0.1	4.3	98.6	0.6
Delay (s)	226.0	47.0	78.2	84.8	31.1	35.3	171.3	61.2	57.4	75.1	128.0	25.6
Level of Service	F	D	E	F	C	D	F	E	E	E	F	C
Approach Delay (s/veh)		102.3			47.9			71.2			113.1	
Approach LOS		F			D			E			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	91.2	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.17			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	93.7%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

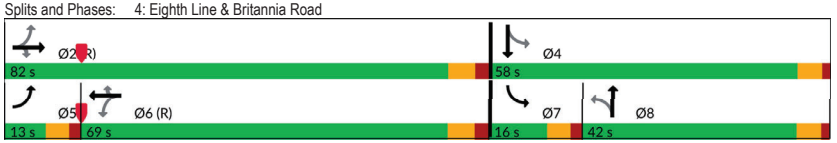
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1227	15	27	722	86	26	162	38	70	171	31
Future Volume (vph)	31	1227	15	27	722	86	26	162	38	70	171	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.971			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1779	0	1825	1875	0
Flt Permitted	0.284			0.170			0.628			0.271		
Satd. Flow (perm)	546	4476	1306	327	4476	1633	1107	1779	0	521	1875	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		8			8	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	32	1252	15	28	737	88	27	165	39	71	174	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	1252	15	28	737	88	27	204	0	71	207	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	13.0	82.0	82.0	69.0	69.0	69.0	42.0	42.0		16.0	58.0	
Total Split (%)	9.3%	58.6%	58.6%	49.3%	49.3%	49.3%	30.0%	30.0%		11.4%	41.4%	
Maximum Green (s)	7.0	75.2	75.2	62.2	62.2	62.2	36.3	36.3		10.0	52.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	94.6	93.8	93.8	86.0	86.0	86.0	21.2	21.2		33.4	33.7	
Actuated g/C Ratio	0.68	0.67	0.67	0.61	0.61	0.61	0.15	0.15		0.24	0.24	
v/c Ratio	0.07	0.42	0.02	0.14	0.27	0.08	0.16	0.74		0.34	0.45	
Control Delay (s/veh)	7.6	7.5	0.0	19.3	15.1	1.5	36.3	55.7		29.9	32.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	7.6	7.5	0.0	19.3	15.1	1.5	36.3	55.7		29.9	32.6	
LOS	A	A	A	B	B	A	D	E		C	C	
Approach Delay (s/veh)		7.4			13.8			53.4			31.9	
Approach LOS		A			B			D			C	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.74		
Intersection Signal Delay (s/veh): 16.0		Intersection LOS: B
Intersection Capacity Utilization 65.9%		ICU Level of Service C
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	32	1252	15	28	737	88	27	204	71	207
v/c Ratio	0.07	0.42	0.02	0.14	0.27	0.08	0.16	0.74	0.34	0.45
Control Delay (s/veh)	7.6	7.5	0.0	19.3	15.1	1.5	36.3	55.7	29.9	32.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.6	7.5	0.0	19.3	15.1	1.5	36.3	55.7	29.9	32.6
Queue Length 50th (m)	1.9	31.9	0.0	3.6	44.2	0.0	5.9	50.5	14.3	41.3
Queue Length 95th (m)	m3.2	38.3	m0.0	11.0	62.2	4.7	13.6	76.7	18.5	43.4
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	433	2997	897	200	2750	1047	287	467	217	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.42	0.02	0.14	0.27	0.08	0.09	0.44	0.33	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1227	15	27	722	86	26	162	38	70	171	31
Future Volume (vph)	31	1227	15	27	722	86	26	162	38	70	171	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1780		1825	1875	
Flt Permitted	0.28	1.00	1.00	0.17	1.00	1.00	0.63	1.00		0.27	1.00	
Satd. Flow (perm)	545	4476	1306	327	4476	1633	1107	1780		521	1875	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	32	1252	15	28	737	88	27	165	39	71	174	33
RTOR Reduction (vph)	0	0	5	0	0	36	0	7	0	0	6	0
Lane Group Flow (vph)	32	1252	10	28	737	52	27	197	0	71	201	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	92.5	92.5	92.5	82.4	82.4	82.4	21.2	21.2		35.0	35.0	
Effective Green, g (s)	92.5	92.5	92.5	82.4	82.4	82.4	21.2	21.2		35.0	35.0	
Actuated g/C Ratio	0.66	0.66	0.66	0.59	0.59	0.59	0.15	0.15		0.25	0.25	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	397	2957	862	192	2634	961	167	269		202	468	
v/s Ratio Prot	0.00	c0.28			0.16			c0.11		0.02	c0.11	
v/s Ratio Perm	0.05		0.01	0.09		0.03	0.02			0.07		
v/c Ratio	0.08	0.42	0.01	0.15	0.28	0.05	0.16	0.73		0.35	0.43	
Uniform Delay, d1	8.7	11.2	8.1	13.0	14.2	12.2	51.7	56.7		41.9	44.1	
Progression Factor	0.73	0.60	1.00	1.00	1.00	1.00	0.69	0.73		0.66	0.71	
Incremental Delay, d2	0.1	0.3	0.0	1.6	0.3	0.1	0.5	9.8		1.0	0.6	
Delay (s)	6.4	7.1	8.1	14.6	14.5	12.3	36.2	51.3		28.6	31.9	
Level of Service	A	A	A	B	B	B	D	D		C	C	
Approach Delay (s/veh)		7.1			14.2			49.6			31.0	
Approach LOS		A			B			D			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	15.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.5	
Intersection Capacity Utilization	65.9%	ICU Level of Service	C	
Analysis Period (min)	15			

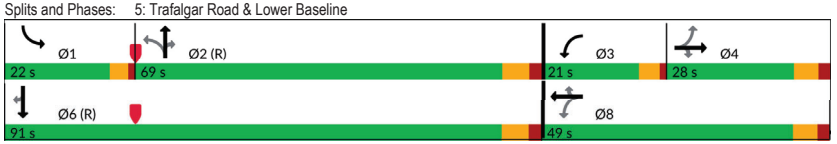
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	553	113	353	212	217	57	2126	260	561	2517	101
Future Volume (vph)	216	553	113	353	212	217	57	2126	260	561	2517	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	3614	1601	1789	3579	1541	1631	4214	1551	3319	4295	1521
Flt Permitted	0.614			0.152			0.063			0.950		
Satd. Flow (perm)	1123	3614	1601	286	3579	1541	108	4214	1551	3319	4295	1521
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			226			143			66
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	225	576	118	368	221	226	57	2126	260	584	2622	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	225	576	118	368	221	226	57	2126	260	584	2622	105
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	4	4	4	3	8	8	2	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	25.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	24.2	24.2	24.2	11.5	24.2	24.2	31.6	31.6	31.6	11.0	31.6	31.6
Total Split (s)	28.0	28.0	28.0	21.0	49.0	49.0	69.0	69.0	69.0	22.0	91.0	91.0
Total Split (%)	20.0%	20.0%	20.0%	15.0%	35.0%	35.0%	49.3%	49.3%	49.3%	15.7%	65.0%	65.0%
Maximum Green (s)	21.8	21.8	21.8	16.5	42.8	42.8	62.4	62.4	62.4	18.0	84.4	84.4
Yellow Time (s)	4.2	4.2	4.2	3.5	4.2	4.2	4.6	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	5.2	4.2	4.2	3.5	4.2	4.2	5.6	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0	7.0						
Flash Don't Walk (s)					11.0	11.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	22.8	23.8	23.8	45.5	44.8	44.8	63.4	64.4	64.4	19.0	86.4	86.4
Actuated g/C Ratio	0.16	0.17	0.17	0.33	0.32	0.32	0.45	0.46	0.46	0.14	0.62	0.62
v/c Ratio	1.24	0.94	0.34	1.31	0.19	0.35	1.19	1.10	0.33	1.30	0.99	0.11
Control Delay (s/veh)	191.7	81.1	17.4	207.9	46.8	17.4	227.0	88.6	11.5	177.5	40.9	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	191.7	81.1	17.4	207.9	46.8	17.4	227.0	88.6	11.5	177.5	40.9	11.3
LOS	F	F	B	F	D	B	F	F	B	F	D	B
Approach Delay (s/veh)		100.0			111.4			83.6			64.1	
Approach LOS		F			F			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.31			
Intersection Signal Delay (s/veh): 80.0		Intersection LOS: E	
Intersection Capacity Utilization 119.6%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	225	576	118	368	221	226	57	2126	260	584	2622	105
v/c Ratio	1.24	0.94	0.34	1.31	0.19	0.35	1.19	1.10	0.33	1.30	0.99	0.11
Control Delay (s/veh)	191.7	81.1	17.4	207.9	46.8	17.4	227.0	88.6	11.5	177.5	40.9	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	191.7	81.1	17.4	207.9	46.8	17.4	227.0	88.6	11.5	177.5	40.9	11.3
Queue Length 50th (m)	~79.8	84.6	5.8	~118.6	28.4	0.0	~19.8	~292.4	19.1	~109.8	258.8	9.7
Queue Length 95th (m)	#133.6	#119.1	23.8	#183.4	42.8	40.5	#36.9	#326.2	39.2	m#94.5	m227.3	m8.9
Internal Link Dist (m)		1293.1			1410.4			889.5			3062.5	
Turn Bay Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Base Capacity (vph)	182	614	350	280	1145	646	48	1938	790	450	2650	963
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.94	0.34	1.31	0.19	0.35	1.19	1.10	0.33	1.30	0.99	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	216	553	113	353	212	217	57	2126	260	561	2517	101
Future Volume (vph)	216	553	113	353	212	217	57	2126	260	561	2517	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	5.2	4.2	4.2	3.5	4.2	4.2	5.6	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1738	3614	1601	1789	3579	1541	1631	4214	1551	3319	4295	1521
Flt Permitted	0.61	1.00	1.00	0.15	1.00	1.00	0.06	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1123	3614	1601	286	3579	1541	108	4214	1551	3319	4295	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	225	576	118	368	221	226	57	2126	260	584	2622	105
RTOR Reduction (vph)	0	0	78	0	0	154	0	0	77	0	0	25
Lane Group Flow (vph)	225	576	40	368	221	72	57	2126	183	584	2622	80
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Prot	NA	Perm
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Actuated Green, G (s)	21.8	21.8	21.8	42.8	42.8	42.8	62.4	62.4	62.4	18.0	84.4	84.4
Effective Green, g (s)	22.8	23.8	23.8	43.8	44.8	44.8	63.4	64.4	64.4	19.0	86.4	86.4
Actuated g/C Ratio	0.16	0.17	0.17	0.31	0.32	0.32	0.45	0.46	0.46	0.14	0.62	0.62
Clearance Time (s)	6.2	6.2	6.2	4.5	6.2	6.2	6.6	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	5.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	182	614	272	277	1145	493	48	1938	713	450	2650	938
v/s Ratio Prot		0.16		c0.17	0.06			0.50		c0.18	0.61	
v/s Ratio Perm	0.20		0.02	c0.25		0.05	c0.53		0.12			0.05
v/c Ratio	1.24	0.94	0.15	1.33	0.19	0.15	1.19	1.10	0.26	1.30	0.99	0.09
Uniform Delay, d1	58.6	57.4	49.5	41.3	34.5	34.0	38.3	37.8	23.1	60.5	26.4	10.8
Progression Factor	1.00	1.00	1.00	1.50	1.34	3.77	1.00	1.00	1.00	0.87	1.45	2.44
Incremental Delay, d2	144.4	22.7	0.5	170.3	0.2	0.3	189.9	52.4	0.9	135.6	3.4	0.0
Delay (s)	203.0	80.1	50.0	232.2	46.4	128.4	228.2	90.2	24.0	188.4	41.6	26.4
Level of Service	F	F	D	F	D	F	F	F	C	F	D	C
Approach Delay (s/veh)		106.3			153.1			86.4			67.0	
Approach LOS		F			F			F			E	

Intersection Summary						
HCM 2000 Control Delay (s/veh)		87.5	HCM 2000 Level of Service		F	
HCM 2000 Volume to Capacity ratio		1.25				
Actuated Cycle Length (s)		140.0	Sum of lost time (s)		15.3	
Intersection Capacity Utilization		119.6%	ICU Level of Service		H	
Analysis Period (min)		15				

c Critical Lane Group

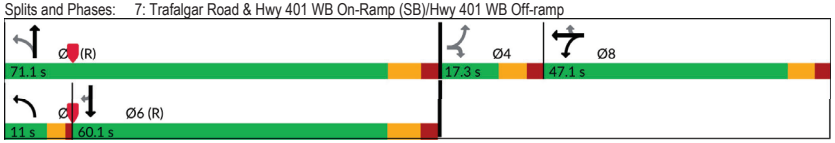
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	7	445	6	280	13	787	0	0	1479	117
Future Volume (vph)	0	0	7	445	6	280	13	787	0	0	1479	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1633	2879	1921	2456	1825	3941	0	0	4309	1276
Flt Permitted				0.950			0.092					
Satd. Flow (perm)	1883	0	1633	2879	1921	2456	177	3941	0	0	4309	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			140			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Adj. Flow (vph)	0	0	7	445	6	280	13	787	0	0	1479	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	7	445	6	280	13	787	0	0	1479	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	25.7	25.7	25.7	95.2	91.1			86.7	86.7
Actuated g/C Ratio			0.07	0.19	0.19	0.19	0.70	0.67			0.64	0.64
v/c Ratio			0.03	0.82	0.02	0.40	0.06	0.30			0.54	0.14
Control Delay (s/veh)			0.1	64.8	41.3	6.4	10.2	10.9			17.2	3.2
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.1	64.8	41.3	6.4	10.2	10.9			17.2	3.2
LOS			A	E	D	A	B	B			B	A
Approach Delay (s/veh)		0.1			42.2			10.9			16.2	
Approach LOS		A			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 20.9		Intersection LOS: C	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	7	445	6	280	13	787	1479	117
v/c Ratio	0.03	0.82	0.02	0.40	0.06	0.30	0.54	0.14
Control Delay (s/veh)	0.1	64.8	41.3	6.4	10.2	10.9	17.2	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.1	64.8	41.3	6.4	10.2	10.9	17.2	3.2
Queue Length 50th (m)	0.0	70.4	1.3	0.0	0.9	34.1	72.9	0.0
Queue Length 95th (m)	0.0	87.1	5.0	13.7	4.8	71.4	170.3	12.3
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	250	849	567	922	209	2650	2758	861
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.52	0.01	0.30	0.06	0.30	0.54	0.14

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	7	445	6	280	13	787	0	0	1479	117
Future Volume (vph)	0	0	7	445	6	280	13	787	0	0	1479	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3941			4309	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.09	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	177	3941			4309	1276
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	7	445	6	280	13	787	0	0	1479	117
RTOR Reduction (vph)	0	0	7	0	0	227	0	0	0	0	0	49
Lane Group Flow (vph)	0	0	0	445	6	53	13	787	0	0	1479	68
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	25.7	25.7	25.7	85.3	85.3			78.5	78.5
Effective Green, g (s)			2.0	25.7	25.7	25.7	85.3	85.3			78.5	78.5
Actuated g/C Ratio			0.01	0.19	0.19	0.19	0.63	0.63			0.58	0.58
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	546	364	465	145	2480			2496	739
v/s Ratio Prot				c0.15	0.00		0.00	c0.20			c0.34	
v/s Ratio Perm			c0.00			0.02	0.05					0.05
v/c Ratio			0.00	0.82	0.02	0.11	0.09	0.32			0.59	0.09
Uniform Delay, d1			65.8	52.6	44.6	45.5	11.9	11.6			18.3	12.7
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	8.7	0.0	0.0	0.1	0.3			1.0	0.2
Delay (s)			65.8	61.3	44.6	45.5	12.0	12.0			19.3	12.9
Level of Service			E	E	D	D	B	B			B	B
Approach Delay (s/veh)		65.8			55.1			12.0			18.8	
Approach LOS		E			E			B			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	25.6	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.63				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)		26.5	
Intersection Capacity Utilization	68.4%	ICU Level of Service		C	
Analysis Period (min)	15				
c Critical Lane Group					

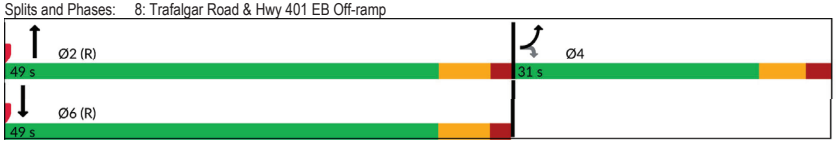
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	908	0	1388	1144	0
Future Volume (vph)	114	908	0	1388	1144	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.880	0.850				
Flt Protected	0.990					
Satd. Flow (prot)	2828	1339	0	4154	4117	0
Flt Permitted	0.990					
Satd. Flow (perm)	2828	1339	0	4154	4117	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	59	59				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Adj. Flow (vph)	114	908	0	1388	1144	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	568	454	0	1388	1144	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	29.6	29.6		36.4	36.4	
Actuated g/C Ratio	0.37	0.37		0.46	0.46	
v/c Ratio	0.52	0.85		0.74	0.61	
Control Delay (s/veh)	20.3	39.2		20.3	17.8	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	20.3	39.2		20.3	17.8	
LOS	C	D		C	B	
Approach Delay (s/veh)	28.7			20.3	17.8	
Approach LOS	C			C	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay (s/veh): 21.9		Intersection LOS: C	
Intersection Capacity Utilization 71.3%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	568	454	1388	1144
v/c Ratio	0.52	0.85	0.74	0.61
Control Delay (s/veh)	20.3	39.2	20.3	17.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.3	39.2	20.3	17.8
Queue Length 50th (m)	37.1	64.8	76.0	58.2
Queue Length 95th (m)	61.8	#144.2	83.1	64.2
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	1084	533	2180	2161
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.52	0.85	0.64	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	908	0	1388	1144	0
Future Volume (vph)	114	908	0	1388	1144	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.88	0.85		1.00	1.00	
Flt Protected	0.99	1.00		1.00	1.00	
Satd. Flow (prot)	2829	1339		4154	4117	
Flt Permitted	0.99	1.00		1.00	1.00	
Satd. Flow (perm)	2829	1339		4154	4117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	908	0	1388	1144	0
RTOR Reduction (vph)	37	37	0	0	0	0
Lane Group Flow (vph)	531	417	0	1388	1144	0
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	29.6	29.6		36.4	36.4	
Effective Green, g (s)	29.6	29.6		36.4	36.4	
Actuated g/C Ratio	0.37	0.37		0.45	0.45	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	1046	495		1890	1873	
v/s Ratio Prot	0.19			c0.33	0.28	
v/s Ratio Perm		c0.31				
v/c Ratio	0.51	0.84		0.73	0.61	
Uniform Delay, d1	19.5	23.1		17.8	16.5	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	12.3		2.6	1.5	
Delay (s)	19.9	35.4		20.4	17.9	
Level of Service	B	D		C	B	
Approach Delay (s/veh)	26.8			20.4	17.9	
Approach LOS	C			C	B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

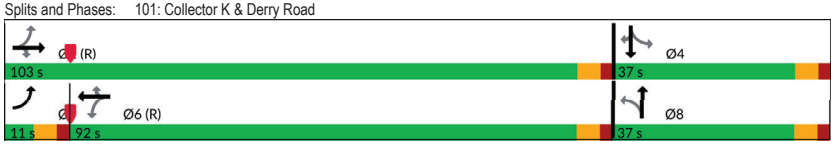
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	3150	65	6	985	11	283	0	11	69	0	23
Future Volume (vph)	30	3150	65	6	985	11	283	0	11	69	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.215			0.045			0.757			0.750		
Satd. Flow (perm)	405	5142	1601	85	5142	1601	1426	1601	0	1413	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			36			70		70				162
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	3424	71	7	1071	12	308	0	12	75	0	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	3424	71	7	1071	12	308	12	0	75	0	25
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	103.0	103.0	92.0	92.0	92.0	37.0	37.0		37.0	37.0	37.0
Total Split (%)	7.9%	73.6%	73.6%	65.7%	65.7%	65.7%	26.4%	26.4%		26.4%	26.4%	26.4%
Maximum Green (s)	5.0	97.0	97.0	86.0	86.0	86.0	31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		Max	Max	Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	97.0	97.0	97.0	90.4	90.4	90.4	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.65	0.65	0.65	0.22	0.22		0.22		0.22
v/c Ratio	0.10	0.96	0.06	0.13	0.32	0.01	0.98	0.03		0.24		0.05
Control Delay (s/veh)	7.4	28.6	3.9	8.7	3.4	0.0	99.2	0.1		47.3		0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	7.4	28.6	3.9	8.7	3.4	0.0	99.2	0.1		47.3		0.2
LOS	A	C	A	A	A	A	F	A		D		A
Approach Delay (s/veh)		27.9			3.4			95.5			35.5	
Approach LOS		C			A			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 27.0		Intersection LOS: C	
Intersection Capacity Utilization 93.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	33	3424	71	7	1071	12	308	12	75	25
v/c Ratio	0.10	0.96	0.06	0.13	0.32	0.01	0.98	0.03	0.24	0.05
Control Delay (s/veh)	7.4	28.6	3.9	8.7	3.4	0.0	99.2	0.1	47.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.4	28.6	3.9	8.7	3.4	0.0	99.2	0.1	47.3	0.2
Queue Length 50th (m)	2.7	298.2	2.8	0.2	11.4	0.0	86.9	0.0	17.5	0.0
Queue Length 95th (m)	6.1	325.2	7.7	m0.5	m15.6	m0.0	#146.6	0.0	32.2	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	330	3562	1120	54	3320	1058	315	409	312	480
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.96	0.06	0.13	0.32	0.01	0.98	0.03	0.24	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	3150	65	6	985	11	283	0	11	69	0	23
Future Volume (vph)	30	3150	65	6	985	11	283	0	11	69	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601		1789		1601
Flt Permitted	0.22	1.00	1.00	0.05	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	406	5142	1601	86	5142	1601	1426	1601		1412		1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	3424	71	7	1071	12	308	0	12	75	0	25
RTOR Reduction (vph)	0	0	11	0	0	4	0	9	0	0	0	19
Lane Group Flow (vph)	33	3424	60	7	1071	8	308	3	0	75	0	6
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	97.0	97.0	97.0	88.0	88.0	88.0	31.0	31.0		31.0		31.0
Effective Green, g (s)	97.0	97.0	97.0	88.0	88.0	88.0	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.63	0.63	0.63	0.22	0.22		0.22		0.22
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	310	3562	1109	54	3232	1006	315	354		312		354
v/s Ratio Prot	0.00	c0.67			0.21			0.00				
v/s Ratio Perm	0.07		0.04	0.08		0.00	c0.22			0.05		0.00
v/c Ratio	0.11	0.96	0.05	0.13	0.33	0.01	0.98	0.01		0.24		0.02
Uniform Delay, d1	7.5	19.8	6.9	10.5	12.2	9.7	54.2	42.5		44.8		42.6
Progression Factor	1.00	1.00	1.00	0.33	0.27	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.2	8.4	0.1	4.4	0.2	0.0	44.2	0.0		1.8		0.1
Delay (s)	7.7	28.2	7.0	7.8	3.6	9.7	98.3	42.5		46.6		42.7
Level of Service	A	C	A	A	A	A	F	D		D		D
Approach Delay (s/veh)		27.6			3.6			96.2			45.6	
Approach LOS		C			A			F			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	27.1	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	1.01				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	93.2%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2286	44	0	1240	8	0	0	21	0	0	82
Future Volume (vph)	0	2286	44	0	1240	8	0	0	21	0	0	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2485	48	0	1348	9	0	0	23	0	0	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2485	48	0	1357	0	0	0	23	0	0	89
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	54.2%	ICU Level of Service A	
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2286	44	0	1240	8	0	0	21	0	0	82
Future Volume (Veh/h)	0	2286	44	0	1240	8	0	0	21	0	0	82
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2485	48	0	1348	9	0	0	23	0	0	89
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.92			0.65			0.69	0.69	0.65	0.69	0.69	0.92
vC, conflicting volume	1357			2533			3023	3842	828	2204	3886	454
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1069			1477			1551	2733	0	368	2795	83
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	97	100	100	90
cM capacity (veh/h)	593			294			48	14	706	378	13	879

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	828	828	828	48	539	539	279	23	89
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	48	0	0	9	23	89
cSH	1700	1700	1700	1700	1700	1700	1700	706	879
Volume to Capacity	0.49	0.49	0.49	0.03	0.32	0.32	0.16	0.03	0.10
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.6
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	9.6
Lane LOS								B	A
Approach Delay (s/veh)	0.0				0.0			10.3	9.6
Approach LOS								B	A

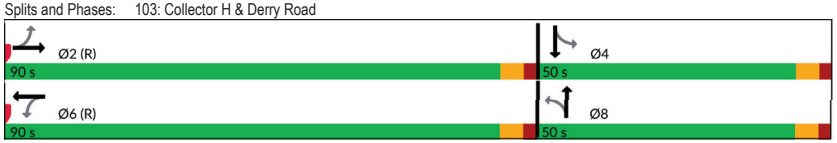
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	54.2%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	2136	51	14	1216	22	207	0	18	26	5	27
Future Volume (vph)	150	2136	51	14	1216	22	207	0	18	26	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.997			0.989			0.937	
Flt Protected	0.950			0.950				0.956			0.978	
Satd. Flow (prot)	1789	4507	0	1789	4507	0	0	1781	0	0	1726	0
Flt Permitted	0.137			0.040				0.725			0.866	
Satd. Flow (perm)	258	4507	0	75	4507	0	0	1350	0	0	1528	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			3			23			29	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	2322	55	15	1322	24	225	0	20	28	5	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	163	2377	0	15	1346	0	0	245	0	0	62	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	90.0	90.0		90.0	90.0		50.0	50.0		50.0	50.0	
Total Split (%)	64.3%	64.3%		64.3%	64.3%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	84.0	84.0		84.0	84.0		44.0	44.0		44.0	44.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	99.0	99.0		99.0	99.0			29.0			29.0	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
v/c Ratio	0.90	0.75		0.29	0.42			0.82			0.18	
Control Delay (s/veh)	44.8	8.2		25.6	7.8			69.0			24.1	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	44.8	8.2		25.6	7.8			69.0			24.1	
LOS	D	A		C	A			E			C	
Approach Delay (s/veh)		10.5			8.0			69.0			24.1	
Approach LOS		B			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 13.3		Intersection LOS: B	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	163	2377	15	1346	245	62
v/c Ratio	0.90	0.75	0.29	0.42	0.82	0.18
Control Delay (s/veh)	44.8	8.2	25.6	7.8	69.0	24.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.8	8.2	25.6	7.8	69.0	24.1
Queue Length 50th (m)	13.3	38.7	0.8	36.0	60.7	7.6
Queue Length 95th (m)	m#59.9	m51.6	m3.6	70.4	84.7	m17.6
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	182	3188	52	3188	440	500
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.75	0.29	0.42	0.56	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	2136	51	14	1216	22	207	0	18	26	5	27
Future Volume (vph)	150	2136	51	14	1216	22	207	0	18	26	5	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.99			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1789	4505		1789	4508			1781			1726	
Flt Permitted	0.14	1.00		0.04	1.00			0.73			0.87	
Satd. Flow (perm)	258	4505		76	4508			1351			1528	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	2322	55	15	1322	24	225	0	20	28	5	29
RTOR Reduction (vph)	0	1	0	0	1	0	0	18	0	0	23	0
Lane Group Flow (vph)	163	2376	0	15	1345	0	0	227	0	0	39	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	99.0	99.0		99.0	99.0			29.0			29.0	
Effective Green, g (s)	99.0	99.0		99.0	99.0			29.0			29.0	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	182	3185		53	3187			279			316	
v/s Ratio Prot		0.53			0.30							
v/s Ratio Perm	c0.63			0.20				c0.17			0.03	
v/c Ratio	0.90	0.75		0.28	0.42			0.81			0.12	
Uniform Delay, d1	16.4	12.7		7.5	8.6			52.9			45.2	
Progression Factor	0.84	0.53		0.96	0.79			1.00			0.95	
Incremental Delay, d2	24.1	0.7		11.4	0.4			16.3			0.2	
Delay (s)	37.9	7.4		18.6	7.1			69.2			42.9	
Level of Service	D	A		B	A			E			D	
Approach Delay (s/veh)		9.3			7.2			69.2			42.9	
Approach LOS		A			A			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	12.6	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.87				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	93.3%	ICU Level of Service		F	
Analysis Period (min)	15				

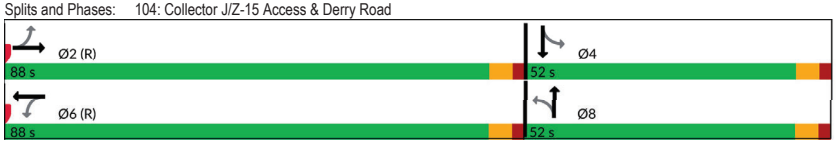
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	2014	67	8	1199	55	271	0	24	12	0	39
Future Volume (vph)	148	2014	67	8	1199	55	271	0	24	12	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.993			0.989			0.897	
Flt Protected	0.950			0.950				0.956			0.988	
Satd. Flow (prot)	1789	4498	0	1789	4489	0	0	1781	0	0	1669	0
Flt Permitted	0.126			0.044				0.734			0.909	
Satd. Flow (perm)	237	4498	0	83	4489	0	0	1367	0	0	1536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			7			23			42	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	161	2189	73	9	1303	60	295	0	26	13	0	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	2262	0	9	1363	0	0	321	0	0	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	88.0	88.0		88.0	88.0		52.0	52.0		52.0	52.0	
Total Split (%)	62.9%	62.9%		62.9%	62.9%		37.1%	37.1%		37.1%	37.1%	
Maximum Green (s)	82.0	82.0		82.0	82.0		46.0	46.0		46.0	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	91.0	91.0		91.0	91.0			37.0			37.0	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
v/c Ratio	1.05	0.77		0.17	0.47			0.85			0.13	
Control Delay (s/veh)	99.5	14.8		19.6	11.3			65.1			13.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	99.5	14.8		19.6	11.3			65.1			13.8	
LOS	F	B		B	B			E			B	
Approach Delay (s/veh)		20.5			11.4			65.1			13.8	
Approach LOS		C			B			E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay (s/veh): 20.8		Intersection LOS: C	
Intersection Capacity Utilization 95.2%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	161	2262	9	1363	321	55
v/c Ratio	1.05	0.77	0.17	0.47	0.85	0.13
Control Delay (s/veh)	99.5	14.8	19.6	11.3	65.1	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	99.5	14.8	19.6	11.3	65.1	13.8
Queue Length 50th (m)	~29.9	94.9	0.8	59.7	79.8	2.7
Queue Length 95th (m)	m#85.9	82.7	m3.2	86.3	108.9	12.4
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	153	2924	53	2919	464	532
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.77	0.17	0.47	0.69	0.10

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	2014	67	8	1199	55	271	0	24	12	0	39
Future Volume (vph)	148	2014	67	8	1199	55	271	0	24	12	0	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.99			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4498		1789	4490			1781			1670	
Flt Permitted	0.13	1.00		0.04	1.00			0.73			0.91	
Satd. Flow (perm)	237	4498		83	4490			1366			1535	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	161	2189	73	9	1303	60	295	0	26	13	0	42
RTOR Reduction (vph)	0	2	0	0	2	0	0	17	0	0	31	0
Lane Group Flow (vph)	161	2260	0	9	1361	0	0	304	0	0	24	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	91.0	91.0		91.0	91.0			37.0			37.0	
Effective Green, g (s)	91.0	91.0		91.0	91.0			37.0			37.0	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	154	2923		53	2918			361			405	
v/s Ratio Prot		0.50			0.30							
v/s Ratio Perm	c0.68			0.11				c0.22			0.02	
v/c Ratio	1.05	0.77		0.17	0.47			0.84			0.06	
Uniform Delay, d1	24.5	17.2		9.6	12.3			48.7			38.5	
Progression Factor	0.84	0.71		0.86	0.82			1.00			1.00	
Incremental Delay, d2	72.4	1.4		6.4	0.5			16.1			0.1	
Delay (s)	92.8	13.7		14.7	10.6			64.9			38.6	
Level of Service	F	B		B	B			E			D	
Approach Delay (s/veh)		18.9			10.6			64.9			38.6	
Approach LOS		B			B			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	20.0	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.99				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	95.2%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3219	946	18	0	50
Future Volume (vph)	0	3219	946	18	0	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	5142	3579	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	5142	3579	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3499	1028	20	0	54
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3499	1028	20	0	54
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3219	946	18	0	50
Future Volume (Veh/h)	0	3219	946	18	0	50
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3499	1028	20	0	54
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.88				0.39	0.88
vC, conflicting volume	1048				2194	514
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	772				0	162
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	93
cM capacity (veh/h)	735				396	748

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	1166	1166	1166	514	514	20	54
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	20	54
cSH	1700	1700	1700	1700	1700	1700	748
Volume to Capacity	0.69	0.69	0.69	0.30	0.30	0.01	0.07
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	1.8
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	10.2
Lane LOS							B
Approach Delay (s/veh)	0.0			0.0			10.2
Approach LOS							B

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	65.5%	ICU Level of Service		C
Analysis Period (min)	15			

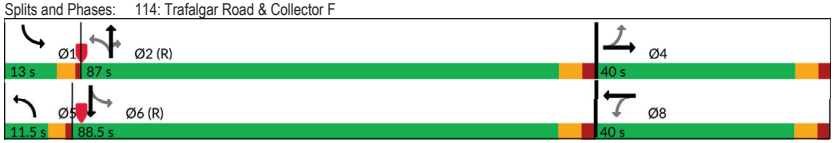
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	62	113	110	76	186	53	2490	121	165	1536	54
Future Volume (vph)	123	62	113	110	76	186	53	2490	121	165	1536	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		50.0	70.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.903			0.894				0.850		0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1626	0	1652	1610	0	1711	4421	1566	1711	4399	0
Flt Permitted	0.331			0.508			0.067			0.047		
Satd. Flow (perm)	575	1626	0	883	1610	0	121	4421	1566	85	4399	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		62			83				55		6	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	134	67	123	120	83	202	58	2707	132	179	1670	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	190	0	120	285	0	58	2707	132	179	1729	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		11.5	87.0	87.0	13.0	88.5	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		8.2%	62.1%	62.1%	9.3%	63.2%	
Maximum Green (s)	34.0	34.0		34.0	34.0		7.5	81.0	81.0	9.0	82.5	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	32.7	32.7		32.7	32.7		90.2	81.0	81.0	95.5	86.3	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.64	0.58	0.58	0.68	0.62	
v/c Ratio	1.00	0.44		0.58	0.65		0.36	1.06	0.14	1.01	0.64	
Control Delay (s/veh)	131.5	33.6		59.9	41.1		13.9	78.3	17.1	109.2	13.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	17.5	0.0	0.0	0.0	
Total Delay (s/veh)	131.5	33.6		59.9	41.1		13.9	95.8	17.1	109.2	13.8	
LOS	F	C		E	D		B	F	B	F	B	
Approach Delay (s/veh)		74.1			46.6			90.6			22.7	
Approach LOS		E			D			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay (s/veh): 63.0		Intersection LOS: E	
Intersection Capacity Utilization 99.4%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	134	190	120	285	58	2707	132	179	1729
v/c Ratio	1.00	0.44	0.58	0.65	0.36	1.06	0.14	1.01	0.64
Control Delay (s/veh)	131.5	33.6	59.9	41.1	13.9	78.3	17.1	109.2	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	17.5	0.0	0.0	0.0
Total Delay (s/veh)	131.5	33.6	59.9	41.1	13.9	95.8	17.1	109.2	13.8
Queue Length 50th (m)	37.5	30.2	29.7	51.2	8.2	~357.3	18.3	~43.1	88.1
Queue Length 95th (m)	#81.3	54.1	m51.6	m82.5	m6.6	m254.5	m12.8	#89.4	97.1
Internal Link Dist (m)		200.2		176.3		308.8			241.5
Turn Bay Length (m)	60.0		50.0		50.0		50.0	70.0	
Base Capacity (vph)	139	441	214	453	163	2557	929	177	2713
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	1	0	105	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.43	0.56	0.63	0.36	1.10	0.14	1.01	0.64

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	62	113	110	76	186	53	2490	121	165	1536	54
Future Volume (vph)	123	62	113	110	76	186	53	2490	121	165	1536	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.90		1.00	0.89		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1626		1652	1609		1711	4421	1566	1711	4398	
Flt Permitted	0.33	1.00		0.51	1.00		0.07	1.00	1.00	0.05	1.00	
Satd. Flow (perm)	576	1626		883	1609		120	4421	1566	85	4398	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	134	67	123	120	83	202	58	2707	132	179	1670	59
RTOR Reduction (vph)	0	48	0	0	64	0	0	0	23	0	2	0
Lane Group Flow (vph)	134	142	0	120	221	0	58	2707	109	179	1727	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	32.7	32.7		32.7	32.7		86.8	81.0	81.0	95.3	85.5	
Effective Green, g (s)	32.7	32.7		32.7	32.7		86.8	81.0	81.0	95.3	85.5	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.62	0.58	0.58	0.68	0.61	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	134	379		206	375		140	2557	906	177	2685	
v/s Ratio Prot		0.09			0.14		0.02	c0.61		c0.07	0.39	
v/s Ratio Perm	c0.23			0.14			0.24		0.07	0.61		
v/c Ratio	1.00	0.38		0.58	0.59		0.41	1.06	0.12	1.01	0.64	
Uniform Delay, d1	53.7	45.1		47.6	47.7		14.0	29.5	13.4	49.8	17.5	
Progression Factor	1.00	1.00		1.00	1.00		1.72	1.84	2.18	1.23	0.71	
Incremental Delay, d2	77.7	0.6		4.2	2.5		0.2	27.5	0.0	66.4	1.1	
Delay (s)	131.5	45.7		51.8	50.0		24.3	81.7	29.1	127.7	13.5	
Level of Service	F	D		D	D		C	F	C	F	B	
Approach Delay (s/veh)		81.1			50.6			78.2			24.2	
Approach LOS		F			D			E			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	57.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	99.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

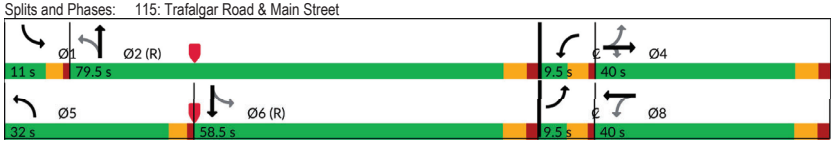
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	131	410	143	319	86	450	2274	290	127	1589	213
Future Volume (vph)	132	131	410	143	319	86	450	2274	290	127	1589	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		50.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt			0.850		0.968			0.983			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3579	1601	1789	3464	0	1711	4346	0	1711	4341	0
Flt Permitted	0.269			0.668			0.071			0.076		
Satd. Flow (perm)	507	3579	1601	1258	3464	0	128	4346	0	137	4341	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			351		23			20			16	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	133	132	414	144	322	87	455	2297	293	128	1605	215
Shared Lane Traffic (%)												
Lane Group Flow (vph)	133	132	414	144	409	0	455	2590	0	128	1820	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0	40.0	9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	9.5	40.0	40.0	9.5	40.0		32.0	79.5		11.0	58.5	
Total Split (%)	6.8%	28.6%	28.6%	6.8%	28.6%		22.9%	56.8%		7.9%	41.8%	
Maximum Green (s)	5.0	34.0	34.0	5.0	34.0		28.0	73.5		7.0	52.5	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Don't Walk (s)		27.0	27.0		27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	27.8	21.3	21.3	27.8	21.3		99.2	80.5		67.2	52.5	
Actuated g/C Ratio	0.20	0.15	0.15	0.20	0.15		0.71	0.58		0.48	0.38	
v/c Ratio	0.91	0.24	0.77	0.54	0.75		0.83	1.03		0.62	1.11	
Control Delay (s/veh)	102.7	52.2	19.8	54.3	62.0		32.0	64.8		55.0	97.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	102.7	52.2	19.8	54.3	62.0		32.0	64.8		55.0	97.7	
LOS	F	D	B	D	E		C	E		E	F	
Approach Delay (s/veh)		42.3			60.0			59.9			94.9	
Approach LOS		D			E			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay (s/veh): 68.9		Intersection LOS: E	
Intersection Capacity Utilization 96.3%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	133	132	414	144	409	455	2590	128	1820
v/c Ratio	0.91	0.24	0.77	0.54	0.75	0.83	1.03	0.62	1.11
Control Delay (s/veh)	102.7	52.2	19.8	54.3	62.0	32.0	64.8	55.0	97.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	102.7	52.2	19.8	54.3	62.0	32.0	64.8	55.0	97.7
Queue Length 50th (m)	31.4	17.4	15.9	34.3	55.6	119.4	~319.7	21.1	~243.2
Queue Length 95th (m)	#58.9	26.0	52.6	51.2	69.8	m98.3	m230.6	36.9	#277.2
Internal Link Dist (m)		882.8			603.0		688.8		212.3
Turn Bay Length (m)	60.0		50.0	90.0		50.0		50.0	
Base Capacity (vph)	146	869	654	269	858	550	2507	207	1637
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.15	0.63	0.54	0.48	0.83	1.03	0.62	1.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	132	131	410	143	319	86	450	2274	290	127	1589	213
Future Volume (vph)	132	131	410	143	319	86	450	2274	290	127	1589	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3579	1601	1789	3464		1711	4346		1711	4343	
Flt Permitted	0.27	1.00	1.00	0.67	1.00		0.07	1.00		0.08	1.00	
Satd. Flow (perm)	506	3579	1601	1259	3464		127	4346		137	4343	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	133	132	414	144	322	87	455	2297	293	128	1605	215
RTOR Reduction (vph)	0	0	298	0	20	0	0	9	0	0	10	0
Lane Group Flow (vph)	133	132	116	144	389	0	455	2582	0	128	1810	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	26.3	21.3	21.3	26.3	21.3		97.2	80.5		65.2	52.5	
Effective Green, g (s)	26.3	21.3	21.3	26.3	21.3		97.2	80.5		65.2	52.5	
Actuated g/C Ratio	0.19	0.15	0.15	0.19	0.15		0.69	0.57		0.47	0.38	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	140	544	243	255	527		548	2498		206	1628	
v/s Ratio Prot	c0.03	0.04		0.02	0.11		c0.24	c0.59		0.06	c0.42	
v/s Ratio Perm	c0.14		0.07	0.09			0.33			0.23		
v/c Ratio	0.95	0.24	0.48	0.56	0.74		0.83	1.03		0.62	1.11	
Uniform Delay, d1	55.4	52.2	54.3	50.7	56.7		39.2	29.8		30.6	43.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.81	1.75		1.33	0.96	
Incremental Delay, d2	60.7	0.2	1.5	2.9	5.4		1.0	16.8		5.2	58.9	
Delay (s)	116.1	52.5	55.8	53.5	62.1		32.7	68.9		45.9	100.7	
Level of Service	F	D	E	D	E		C	E		D	F	
Approach Delay (s/veh)		66.9			59.9			63.5			97.1	
Approach LOS		E			E			E			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	74.1	HCM 2000 Level of Service		E	
HCM 2000 Volume to Capacity ratio	1.02				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		20.5	
Intersection Capacity Utilization	96.3%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

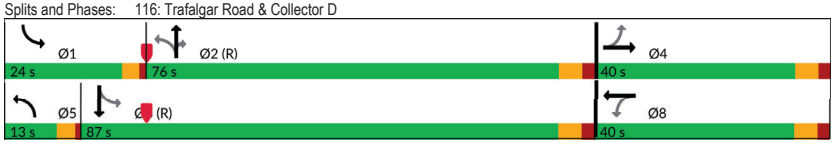
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	12	254	76	8	129	90	2542	210	348	1434	94
Future Volume (vph)	268	12	254	76	8	129	90	2542	210	348	1434	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			70.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.857			0.859				0.850		0.991	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1543	0	1652	1547	0	1711	4421	1566	1711	4381	0
Flt Permitted	0.593			0.338			0.079			0.054		
Satd. Flow (perm)	1031	1543	0	588	1547	0	142	4421	1566	97	4381	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		140			140				86		11	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	291	13	276	83	9	140	98	2763	228	378	1559	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	291	289	0	83	149	0	98	2763	228	378	1661	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		13.0	76.0	76.0	24.0	87.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		9.3%	54.3%	54.3%	17.1%	62.1%	
Maximum Green (s)	34.0	34.0		34.0	34.0		9.0	70.0	70.0	20.0	81.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	34.0	34.0		34.0	34.0		80.1	70.0	70.0	96.0	81.9	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.57	0.50	0.50	0.69	0.59	
v/c Ratio	1.16	0.60		0.58	0.31		0.57	1.25	0.28	1.27	0.65	
Control Delay (s/veh)	154.7	29.4		65.2	9.5		33.8	138.4	5.6	167.3	27.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	154.7	29.4		65.2	9.5		33.8	138.4	5.6	167.3	27.4	
LOS	F	C		E	A		C	F	A	F	C	
Approach Delay (s/veh)		92.3			29.4			125.3			53.4	
Approach LOS		F			C			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay (s/veh): 93.6		Intersection LOS: F	
Intersection Capacity Utilization 111.4%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	291	289	83	149	98	2763	228	378	1661
v/c Ratio	1.16	0.60	0.58	0.31	0.57	1.25	0.28	1.27	0.65
Control Delay (s/veh)	154.7	29.4	65.2	9.5	33.8	138.4	5.6	167.3	27.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	154.7	29.4	65.2	9.5	33.8	138.4	5.6	167.3	27.4
Queue Length 50th (m)	~96.8	37.1	20.7	2.0	6.3	~401.4	9.5	~121.5	113.4
Queue Length 95th (m)	#154.6	68.7	#40.6	19.6	m9.8	#429.5	m4.5	m#120.6	m110.7
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	250	480	142	481	183	2210	826	297	2567
Starvation Cap Reductn	0	0	0	0	0	25	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.60	0.58	0.31	0.54	1.26	0.28	1.27	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	268	12	254	76	8	129	90	2542	210	348	1434	94
Future Volume (vph)	268	12	254	76	8	129	90	2542	210	348	1434	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.86		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1543		1652	1547		1711	4421	1566	1711	4380	
Flt Permitted	0.59	1.00		0.34	1.00		0.08	1.00	1.00	0.05	1.00	
Satd. Flow (perm)	1031	1543		588	1547		142	4421	1566	97	4380	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	291	13	276	83	9	140	98	2763	228	378	1559	102
RTOR Reduction (vph)	0	106	0	0	106	0	0	0	43	0	5	0
Lane Group Flow (vph)	291	183	0	83	43	0	98	2763	185	378	1656	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0		78.1	70.0	70.0	94.0	81.9	
Effective Green, g (s)	34.0	34.0		34.0	34.0		78.1	70.0	70.0	94.0	81.9	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.56	0.50	0.50	0.67	0.59	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	250	374		142	375		169	2210	783	295	2562	
v/s Ratio Prot		0.12			0.03		0.03	0.62		c0.18	0.38	
v/s Ratio Perm	c0.28			0.14			0.29		0.12	c0.67		
v/c Ratio	1.16	0.49		0.58	0.11		0.58	1.25	0.24	1.28	0.65	
Uniform Delay, d1	53.0	45.5		46.8	41.3		17.0	35.0	19.8	49.9	19.4	
Progression Factor	1.00	1.00		1.00	1.00		1.72	0.65	0.42	1.03	1.39	
Incremental Delay, d2	108.5	1.0		6.0	0.1		1.8	114.1	0.3	133.5	0.3	
Delay (s)	161.5	46.6		52.8	41.4		31.1	137.0	8.7	184.6	27.2	
Level of Service	F	D		D	D		C	F	A	F	C	
Approach Delay (s/veh)		104.2			45.5			124.2			56.4	
Approach LOS		F			D			F			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	95.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	111.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

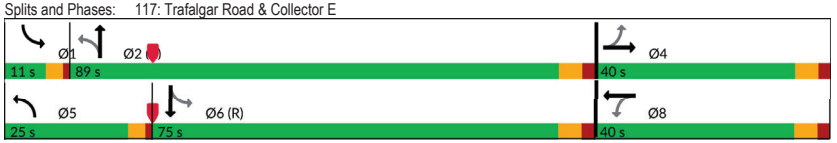
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	6	26	60	6	65	10	2726	63	91	1669	4
Future Volume (vph)	51	6	26	60	6	65	10	2726	63	91	1669	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.880			0.863			0.997				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1657	0	1789	1625	0	1711	4408	0	1711	4421	0
Flt Permitted	0.706			0.734			0.080			0.038		
Satd. Flow (perm)	1330	1657	0	1382	1625	0	144	4408	0	68	4421	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			71			4				
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	7	28	65	7	71	11	2963	68	99	1814	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	55	35	0	65	78	0	11	3031	0	99	1818	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	12.7	12.7		12.7	12.7		109.8	101.3		117.3	111.1	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.78	0.72		0.84	0.79	
v/c Ratio	0.46	0.20		0.52	0.37		0.06	0.95		0.57	0.52	
Control Delay (s/veh)	72.3	26.5		73.8	18.4		4.1	19.7		40.1	7.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	44.4		0.0	0.0	
Total Delay (s/veh)	72.3	26.5		73.8	18.4		4.1	64.2		40.1	7.6	
LOS	E	C		E	B		A	E		D	A	
Approach Delay (s/veh)		54.5			43.6			64.0			9.3	
Approach LOS		D			D			E			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay (s/veh): 43.0		Intersection LOS: D	
Intersection Capacity Utilization 83.2%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



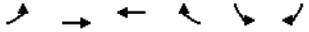
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	35	65	78	11	3031	99	1818
v/c Ratio	0.46	0.20	0.52	0.37	0.06	0.95	0.57	0.52
Control Delay (s/veh)	72.3	26.5	73.8	18.4	4.1	19.7	40.1	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	44.4	0.0	0.0
Total Delay (s/veh)	72.3	26.5	73.8	18.4	4.1	64.2	40.1	7.6
Queue Length 50th (m)	15.1	1.8	17.7	0.0	0.6	169.6	15.7	66.6
Queue Length 95th (m)	m28.2	m12.4	m32.3	m16.5	m0.8	m152.7	m32.1	81.9
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	323	423	335	448	355	3191	174	3509
Starvation Cap Reductn	0	0	0	0	0	0	0	139
Spillback Cap Reductn	0	0	0	11	0	721	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.08	0.19	0.18	0.03	1.23	0.57	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

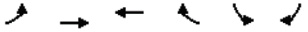
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	6	26	60	6	65	10	2726	63	91	1669	4
Future Volume (vph)	51	6	26	60	6	65	10	2726	63	91	1669	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.88		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1657		1789	1626		1711	4406		1711	4419	
Flt Permitted	0.71	1.00		0.73	1.00		0.08	1.00		0.04	1.00	
Satd. Flow (perm)	1330	1657		1383	1626		144	4406		68	4419	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	55	7	28	65	7	71	11	2963	68	99	1814	4
RTOR Reduction (vph)	0	25	0	0	65	0	0	1	0	0	0	0
Lane Group Flow (vph)	55	10	0	65	13	0	11	3030	0	99	1818	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	12.7	12.7		12.7	12.7		103.9	101.3		115.3	108.7	
Effective Green, g (s)	12.7	12.7		12.7	12.7		103.9	101.3		115.3	108.7	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.74	0.72		0.82	0.78	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	120	150		125	147		135	3188		173	3431	
v/s Ratio Prot		0.01			0.01		0.00	c0.69		c0.04	0.41	
v/s Ratio Perm	0.04			c0.05			0.06			0.43		
v/c Ratio	0.46	0.06		0.52	0.09		0.08	0.95		0.57	0.53	
Uniform Delay, d1	60.4	58.2		60.7	58.4		5.0	17.1		44.0	5.9	
Progression Factor	1.00	1.01		0.98	0.91		1.44	1.04		1.21	1.21	
Incremental Delay, d2	2.8	0.2		3.9	0.3		0.0	0.9		3.5	0.5	
Delay (s)	63.4	59.0		63.2	53.2		7.3	18.7		56.9	7.6	
Level of Service	E	E		E	D		A	B		E	A	
Approach Delay (s/veh)		61.7			57.8			18.7			10.2	
Approach LOS		E			E			B			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	17.4	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.88				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	83.2%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	33	552	536	446	121	8
Future Volume (vph)	33	552	536	446	121	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.932		0.991	
Flt Protected		0.997			0.955	
Satd. Flow (prot)	0	3411	3189	0	1704	0
Flt Permitted		0.997			0.955	
Satd. Flow (perm)	0	3411	3189	0	1704	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	600	583	485	132	9
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	636	1068	0	141	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	33	552	536	446	121	8
Future Volume (Veh/h)	33	552	536	446	121	8
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	36	600	583	485	132	9
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1068				1198	534
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1068				1198	534
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				22	98
cM capacity (veh/h)	648				168	491

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	236	400	389	679	141
Volume Left	36	0	0	0	132
Volume Right	0	0	0	485	9
cSH	648	1700	1700	1700	176
Volume to Capacity	0.06	0.24	0.23	0.40	0.80
Queue Length 95th (m)	1.3	0.0	0.0	0.0	41.1
Control Delay (s/veh)	2.2	0.0	0.0	0.0	77.7
Lane LOS	A				F
Approach Delay (s/veh)	0.8		0.0		77.7
Approach LOS					F

Intersection Summary				
Average Delay		6.2		
Intersection Capacity Utilization		53.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	303	245	446	0	0	102
Future Volume (vph)	303	245	446	0	0	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.973				
Satd. Flow (prot)	0	3482	3579	0	1629	0
Flt Permitted		0.973				
Satd. Flow (perm)	0	3482	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	303	245	446	0	0	102
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	548	446	0	102	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	303	245	446	0	0	102
Future Volume (Veh/h)	303	245	446	0	0	102
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	303	245	446	0	0	102
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	446				1175	223
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	446				1175	223
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	73				100	87
cM capacity (veh/h)	1111				134	780

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	385	163	297	149	102
Volume Left	303	0	0	0	0
Volume Right	0	0	0	0	102
cSH	1111	1700	1700	1700	780
Volume to Capacity	0.27	0.10	0.17	0.09	0.13
Queue Length 95th (m)	8.5	0.0	0.0	0.0	3.4
Control Delay (s/veh)	8.0	0.0	0.0	0.0	10.3
Lane LOS	A				B
Approach Delay (s/veh)	5.6		0.0		10.3
Approach LOS					B

Intersection Summary				
Average Delay	3.8			
Intersection Capacity Utilization	45.4%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	245	0	0	0	0	446
Future Volume (vph)	245	0	0	0	0	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			52.5	161.7	
Travel Time (s)	55.9			3.9	12.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	266	0	0	0	0	485
Shared Lane Traffic (%)						
Lane Group Flow (vph)	266	0	0	0	0	485
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	245	0	0	0	0	446
Future Volume (vph)	245	0	0	0	0	446
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	266	0	0	0	0	485

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	266	0	485
Volume Left (vph)	266	0	0
Volume Right (vph)	0	0	485
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	6.1	5.6	4.2
Degree Utilization, x	0.45	0.00	0.57
Capacity (veh/h)	558	618	828
Control Delay (s/veh)	13.0	7.4	12.6
Approach Delay (s/veh)	13.0		12.6
Approach LOS	B		B

Intersection Summary			
Delay	12.7		
Level of Service	B		
Intersection Capacity Utilization	30.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	17	50	0	0	0
Future Volume (vph)	0	17	50	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	18	54	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	18	0	0	54	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	17	50	0	0	0
Future Volume (Veh/h)	0	17	50	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	18	54	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	108	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	108	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	97			
cM capacity (veh/h)	860	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	18	54	0
Volume Left	0	54	0
Volume Right	18	0	0
cSH	1085	1623	1700
Volume to Capacity	0.02	0.03	0.00
Queue Length 95th (m)	0.4	0.8	0.0
Control Delay (s/veh)	8.4	7.3	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	7.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	7.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

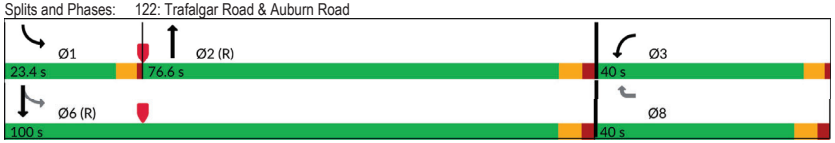
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	69	2183	172	171	1816
Future Volume (vph)	30	69	2183	172	171	1816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.989			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4372	0	1711	4421
Flt Permitted	0.950				0.038	
Satd. Flow (perm)	1789	1601	4372	0	68	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		69	11			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	69	2183	172	171	1816
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	69	2355	0	171	1816
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	3		2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	3	8	2		1	6
Switch Phase						
Minimum Initial (s)	5.0	10.0	20.0		5.0	20.0
Minimum Split (s)	9.5	40.0	40.0		9.5	40.0
Total Split (s)	40.0	40.0	76.6		23.4	100.0
Total Split (%)	28.6%	28.6%	54.7%		16.7%	71.4%
Maximum Green (s)	35.5	34.0	70.6		18.9	94.0
Yellow Time (s)	3.5	4.0	4.0		3.5	4.0
All-Red Time (s)	1.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	6.0	6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)		7.0	7.0			7.0
Flash Don't Walk (s)		9.0	27.0			27.0
Pedestrian Calls (#/hr)		0	0			0
Act Effct Green (s)	9.4	10.1	102.8		122.6	122.3
Actuated g/C Ratio	0.07	0.07	0.73		0.88	0.87
v/c Ratio	0.25	0.39	0.73		0.77	0.47
Control Delay (s/veh)	65.9	19.9	2.9		59.0	3.0
Queue Delay	0.0	0.0	0.3		0.0	0.0
Total Delay (s/veh)	65.9	19.9	3.1		59.0	3.0
LOS	E	B	A		E	A
Approach Delay (s/veh)	33.8		3.1			7.8
Approach LOS	C		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 72.1%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	30	69	2355	171	1816
v/c Ratio	0.25	0.39	0.73	0.77	0.47
Control Delay (s/veh)	65.9	19.9	2.9	59.0	3.0
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	65.9	19.9	3.1	59.0	3.0
Queue Length 50th (m)	8.0	0.0	25.7	31.8	44.0
Queue Length 95th (m)	18.5	15.1	m25.2	55.1	51.0
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	453	441	3211	285	3863
Starvation Cap Reductn	0	0	259	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.16	0.80	0.60	0.47

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	69	2183	172	171	1816
Future Volume (vph)	30	69	2183	172	171	1816
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	4.5	6.0	6.0		4.5	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4372		1711	4421
Flt Permitted	0.95	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1789	1601	4372		68	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	30	69	2183	172	171	1816
RTOR Reduction (vph)	0	65	3	0	0	0
Lane Group Flow (vph)	30	4	2352	0	171	1816
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	3		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	9.6	8.1	101.5		119.9	119.9
Effective Green, g (s)	9.6	8.1	101.5		119.9	119.9
Actuated g/C Ratio	0.07	0.06	0.73		0.86	0.86
Clearance Time (s)	4.5	6.0	6.0		4.5	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	122	92	3169		221	3786
v/s Ratio Prot	c0.02		0.54		c0.08	0.41
v/s Ratio Perm		0.00			c0.59	
v/c Ratio	0.25	0.04	0.74		0.77	0.48
Uniform Delay, d1	61.8	62.3	11.5		44.3	2.4
Progression Factor	1.00	1.00	0.22		1.00	1.00
Incremental Delay, d2	1.1	0.2	0.1		15.4	0.4
Delay (s)	62.8	62.5	2.6		59.7	2.9
Level of Service	E	E	A		E	A
Approach Delay (s/veh)	62.6		2.6			7.8
Approach LOS	E		A			A

Intersection Summary

HCM 2000 Control Delay (s/veh)	6.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	17	51	50	17	0
Future Volume (vph)	0	17	51	50	17	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.975		
Satd. Flow (prot)	1629	0	0	1836	1883	0
Flt Permitted				0.975		
Satd. Flow (perm)	1629	0	0	1836	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	17	51	50	17	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	17	0	0	101	17	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	17	51	50	17	0
Future Volume (Veh/h)	0	17	51	50	17	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	17	51	50	17	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	169	17	17			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	169	17	17			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	97			
cM capacity (veh/h)	795	1062	1600			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	17	101	17
Volume Left	0	51	0
Volume Right	17	0	0
cSH	1062	1600	1700
Volume to Capacity	0.02	0.03	0.01
Queue Length 95th (m)	0.4	0.8	0.0
Control Delay (s/veh)	8.4	3.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	3.8	0.0
Approach LOS	A		

Intersection Summary				
Average Delay		3.9		
Intersection Capacity Utilization		22.1%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	48	43	30	54	67	79
Future Volume (vph)	48	43	30	54	67	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.936		0.913			
Flt Protected	0.974					0.978
Satd. Flow (prot)	1642	0	1644	0	0	1761
Flt Permitted	0.974					0.978
Satd. Flow (perm)	1642	0	1644	0	0	1761
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	52	47	33	59	73	86
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	0	92	0	0	159
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	48	43	30	54	67	79
Future Volume (Veh/h)	48	43	30	54	67	79
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	52	47	33	59	73	86
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	295	63			92	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	295	63			92	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	95			95	
cM capacity (veh/h)	663	1002			1503	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	99	92	159
Volume Left	52	0	73
Volume Right	47	59	0
cSH	790	1700	1503
Volume to Capacity	0.13	0.05	0.05
Queue Length 95th (m)	3.3	0.0	1.2
Control Delay (s/veh)	10.2	0.0	3.7
Lane LOS	B		A
Approach Delay (s/veh)	10.2	0.0	3.7
Approach LOS	B		

Intersection Summary			
Average Delay	4.6		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	185	12	57	113	2	12	15	47	125	6	0
Future Volume (vph)	0	185	12	57	113	2	12	15	47	125	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.999			0.914				
Flt Protected					0.984			0.992			0.955	
Satd. Flow (prot)	0	1868	0	0	1770	0	0	1708	0	0	1799	0
Flt Permitted					0.984			0.992			0.955	
Satd. Flow (perm)	0	1868	0	0	1770	0	0	1708	0	0	1799	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	201	13	62	123	2	13	16	51	136	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	214	0	0	187	0	0	80	0	0	143	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	185	12	57	113	2	12	15	47	125	6	0
Future Volume (Veh/h)	0	185	12	57	113	2	12	15	47	125	6	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	201	13	62	123	2	13	16	51	136	7	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	125			214			459	457	208	515	462	124
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	125			214			459	457	208	515	462	124
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			97	97	94	67	99	100
cM capacity (veh/h)	1462			1356			489	477	833	416	474	927

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	214	187	80	143
Volume Left	0	62	13	136
Volume Right	13	2	51	0
cSH	1462	1356	659	418
Volume to Capacity	0.00	0.05	0.12	0.34
Queue Length 95th (m)	0.0	1.1	3.1	11.4
Control Delay (s/veh)	0.0	2.8	11.2	18.0
Lane LOS		A	B	C
Approach Delay (s/veh)	0.0	2.8	11.2	18.0
Approach LOS			B	C

Intersection Summary				
Average Delay		6.4		
Intersection Capacity Utilization		43.6%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	330	60	21	137	40	49
Future Volume (vph)	330	60	21	137	40	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.979				0.925	
Flt Protected				0.993	0.978	
Satd. Flow (prot)	1844	0	0	1870	1704	0
Flt Permitted				0.993	0.978	
Satd. Flow (perm)	1844	0	0	1870	1704	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	359	65	23	149	43	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	424	0	0	172	96	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	36.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	2	82	11	0	127
Future Volume (vph)	19	2	82	11	0	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.988		0.984			
Flt Protected	0.956					
Satd. Flow (prot)	1642	0	1772	0	0	1801
Flt Permitted	0.956					
Satd. Flow (perm)	1642	0	1772	0	0	1801
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	2	89	12	0	138
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	101	0	0	138
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	2	82	11	0	127
Future Volume (Veh/h)	19	2	82	11	0	127
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	2	89	12	0	138
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	233	95			101	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	233	95			101	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			100	
cM capacity (veh/h)	755	962			1491	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	23	101	138
Volume Left	21	0	0
Volume Right	2	12	0
cSH	770	1700	1491
Volume to Capacity	0.03	0.06	0.00
Queue Length 95th (m)	0.7	0.0	0.0
Control Delay (s/veh)	9.8	0.0	0.0
Lane LOS	A		
Approach Delay (s/veh)	9.8	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	16.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	51	6	6	15	10	3	62	3	5	70	0
Future Volume (vph)	2	51	6	6	15	10	3	62	3	5	70	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.956			0.994				
Flt Protected		0.998			0.990			0.998			0.997	
Satd. Flow (prot)	0	1709	0	0	1645	0	0	1786	0	0	1795	0
Flt Permitted		0.998			0.990			0.998			0.997	
Satd. Flow (perm)	0	1709	0	0	1645	0	0	1786	0	0	1795	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	55	7	7	16	11	3	67	3	5	76	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	64	0	0	34	0	0	73	0	0	81	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.5%	ICU Level of Service A	
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	51	6	6	15	10	3	62	3	5	70	0
Future Volume (Veh/h)	2	51	6	6	15	10	3	62	3	5	70	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	55	7	7	16	11	3	67	3	5	76	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	180	162	76	195	161	69	76			70		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	180	162	76	195	161	69	76			70		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	92	99	99	98	99	100			100		
cM capacity (veh/h)	758	727	985	712	728	995	1523			1531		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	64	34	73	81
Volume Left	2	7	3	5
Volume Right	7	11	3	0
cSH	749	793	1523	1531
Volume to Capacity	0.09	0.04	0.00*	0.00*
Queue Length 95th (m)	2.1	1.0	0.0	0.1
Control Delay (s/veh)	10.3	9.7	0.3	0.5
Lane LOS	B	A	A	A
Approach Delay (s/veh)	10.3	9.7	0.3	0.5
Approach LOS	B	A		

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	16.5%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	107	18	0	24	0	28	151	30	0	83	8
Future Volume (vph)	4	107	18	0	24	0	28	151	30	0	83	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981						0.980			0.988	
Flt Protected		0.999						0.993				
Satd. Flow (prot)	0	1846	0	0	1883	0	0	1752	0	0	1779	0
Flt Permitted		0.999						0.993				
Satd. Flow (perm)	0	1846	0	0	1883	0	0	1752	0	0	1779	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	116	20	0	26	0	30	164	33	0	90	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	140	0	0	26	0	0	227	0	0	99	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	107	18	0	24	0	28	151	30	0	83	8
Future Volume (Veh/h)	4	107	18	0	24	0	28	151	30	0	83	8
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	116	20	0	26	0	30	164	33	0	90	9
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	348	352	95	413	340	181	99			197		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	348	352	95	413	340	181	99			197		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	79	98	100	95	100	98			100		
cM capacity (veh/h)	577	562	962	446	570	862	1494			1376		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	140	26	227	99
Volume Left	4	0	30	0
Volume Right	20	0	33	9
cSH	598	570	1494	1376
Volume to Capacity	0.23	0.05	0.02	0.00
Queue Length 95th (m)	6.9	1.1	0.5	0.0
Control Delay (s/veh)	12.9	11.6	1.1	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	12.9	11.6	1.1	0.0
Approach LOS	B	B		

Intersection Summary					
Average Delay		4.8			
Intersection Capacity Utilization		34.7%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	126	14	8	123	5	14	20	7	1	66	79
Future Volume (vph)	68	126	14	8	123	5	14	20	7	1	66	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.995			0.976			0.927	
Flt Protected		0.984			0.997			0.984				
Satd. Flow (prot)	0	1695	0	0	1786	0	0	1729	0	0	1669	0
Flt Permitted		0.984			0.997			0.984				
Satd. Flow (perm)	0	1695	0	0	1786	0	0	1729	0	0	1669	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	137	15	9	134	5	15	22	8	1	72	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	226	0	0	148	0	0	45	0	0	159	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	41.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	126	14	8	123	5	14	20	7	1	66	79
Future Volume (Veh/h)	68	126	14	8	123	5	14	20	7	1	66	79
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	137	15	9	134	5	15	22	8	1	72	86
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	245	177	115	257	216	26	158			30		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	245	177	115	257	216	26	158			30		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	88	81	98	98	80	100	99			100		
cM capacity (veh/h)	593	709	937	579	674	1050	1422			1583		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	226	148	45	159
Volume Left	74	9	15	1
Volume Right	15	5	8	86
cSH	676	676	1422	1583
Volume to Capacity	0.33	0.22	0.01	0.00*
Queue Length 95th (m)	11.2	6.3	0.2	0.0
Control Delay (s/veh)	13.0	11.8	2.6	0.1
Lane LOS	B	B	A	A
Approach Delay (s/veh)	13.0	11.8	2.6	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay	8.3			
Intersection Capacity Utilization	41.0%	ICU Level of Service		A
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	153	0	13	117	44	1	13	4	33	37	12
Future Volume (vph)	11	153	0	13	117	44	1	13	4	33	37	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.966			0.972			0.980	
Flt Protected		0.997			0.996			0.997			0.980	
Satd. Flow (prot)	0	1795	0	0	1732	0	0	1745	0	0	1729	0
Flt Permitted		0.997			0.996			0.997			0.980	
Satd. Flow (perm)	0	1795	0	0	1732	0	0	1745	0	0	1729	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	166	0	14	127	48	1	14	4	36	40	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	178	0	0	189	0	0	19	0	0	89	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	153	0	13	117	44	1	13	4	33	37	12
Future Volume (Veh/h)	11	153	0	13	117	44	1	13	4	33	37	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	166	0	14	127	48	1	14	4	36	40	13
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	175			166			402	393	166	380	369	151
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	175			166			402	393	166	380	369	151
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	97	100	94	93	99
cM capacity (veh/h)	1401			1412			513	533	878	556	550	895

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	178	189	19	89
Volume Left	12	14	1	36
Volume Right	0	48	4	13
cSH	1401	1412	580	585
Volume to Capacity	0.00*	0.00*	0.03	0.15
Queue Length 95th (m)	0.2	0.2	0.8	4.1
Control Delay (s/veh)	0.6	0.6	11.4	12.2
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.6	0.6	11.4	12.2
Approach LOS			B	B

Intersection Summary				
Average Delay		3.2		
Intersection Capacity Utilization		30.5%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	116	103	40	134	31	58
Future Volume (vph)	116	103	40	134	31	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.936				0.912	
Flt Protected	0.974		0.950			
Satd. Flow (prot)	1642	0	1711	0	1642	0
Flt Permitted	0.974		0.950			
Satd. Flow (perm)	1642	0	1711	0	1642	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	126	112	43	146	34	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	238	0	43	146	97	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			3.3	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

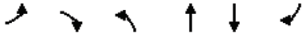
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	116	103	40	134	31	58
Future Volume (Veh/h)	116	103	40	134	31	58
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	126	112	43	146	34	63
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	298	66	97			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	298	66	97			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	81	89	97			
cM capacity (veh/h)	674	998	1496			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	238	43	97
Volume Left	126	43	0
Volume Right	112	0	63
cSH	796	1496	1700
Volume to Capacity	0.30	0.03	0.06
Queue Length 95th (m)	9.6	0.7	0.0
Control Delay (s/veh)	11.4	7.5	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	11.4	Err	0.0
Approach LOS	B		

Intersection Summary				
Average Delay		Err		
Intersection Capacity Utilization		Err%	ICU Level of Service	H
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	9	54	28	17	0
Future Volume (vph)	0	9	54	28	17	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.968		
Satd. Flow (prot)	1629	0	0	1823	1883	0
Flt Permitted				0.968		
Satd. Flow (perm)	1629	0	0	1823	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	364.2	
Travel Time (s)	16.7			24.3	18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	10	59	30	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	10	0	0	89	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	9	54	28	17	0
Future Volume (Veh/h)	0	9	54	28	17	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	10	59	30	18	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	166	18	18			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	166	18	18			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	96			
cM capacity (veh/h)	794	1061	1599			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	10	89	18
Volume Left	0	59	0
Volume Right	10	0	0
cSH	1061	1599	1700
Volume to Capacity	0.00*	0.04	0.01
Queue Length 95th (m)	0.2	0.9	0.0
Control Delay (s/veh)	8.4	5.0	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	5.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.5		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	17	131	0	12	10	7
Future Volume (vph)	17	131	0	12	10	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.880				0.943	
Flt Protected					0.972	
Satd. Flow (prot)	1585	0	0	1801	1650	0
Flt Permitted					0.972	
Satd. Flow (perm)	1585	0	0	1801	1650	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	142	0	13	11	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	160	0	0	13	19	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	17	131	0	12	10	7
Future Volume (Veh/h)	17	131	0	12	10	7
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	142	0	13	11	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	30	0	177	26	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	30	0	177	26	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	98	87	100	98	99	
cM capacity (veh/h)	857	1085	668	861	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	160	13	19
Volume Left	0	0	11
Volume Right	142	0	8
cSH	1053	861	1623
Volume to Capacity	0.15	0.02	0.00*
Queue Length 95th (m)	4.1	0.3	0.2
Control Delay (s/veh)	9.0	9.2	4.2
Lane LOS	A	A	A
Approach Delay (s/veh)	9.0	9.2	4.2
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.6		
Intersection Capacity Utilization	19.0%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

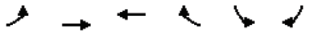
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	73	27	46	73	1
Future Volume (vph)	1	73	27	46	73	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.867				0.998	
Flt Protected	0.999			0.982		
Satd. Flow (prot)	1506	0	0	1768	1797	0
Flt Permitted	0.999			0.982		
Satd. Flow (perm)	1506	0	0	1768	1797	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	79	29	50	79	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	80	0	0	79	80	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	73	27	46	73	1
Future Volume (Veh/h)	1	73	27	46	73	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1	79	29	50	79	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	188	80	80			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	188	80	80			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	98			
cM capacity (veh/h)	786	981	1518			

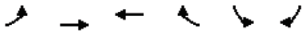
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	80	79	80
Volume Left	1	29	0
Volume Right	79	0	1
cSH	978	1518	1700
Volume to Capacity	0.08	0.02	0.05
Queue Length 95th (m)	2.0	0.4	0.0
Control Delay (s/veh)	9.0	2.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	9.0	2.8	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	21.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	354	120	72	180	60
Future Volume (vph)	35	354	120	72	180	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.949		0.966	
Flt Protected		0.996			0.964	
Satd. Flow (prot)	0	1793	1709	0	1619	0
Flt Permitted		0.996			0.964	
Satd. Flow (perm)	0	1793	1709	0	1619	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	385	130	78	196	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	423	208	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	354	120	72	180	60
Future Volume (Veh/h)	35	354	120	72	180	60
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	385	130	78	196	65
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.98				0.98	0.98
vC, conflicting volume	208				630	169
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	182				613	142
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				55	93
cM capacity (veh/h)	1366				435	888

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	423	208	261
Volume Left	38	0	196
Volume Right	0	78	65
cSH	1366	1700	498
Volume to Capacity	0.03	0.12	0.52
Queue Length 95th (m)	0.7	0.0	22.8
Control Delay (s/veh)	0.9	0.0	19.9
Lane LOS	A		C
Approach Delay (s/veh)	0.9	0.0	19.9
Approach LOS			C

Intersection Summary			
Average Delay	6.3		
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	109	7	5	51	39	16
Future Volume (vph)	109	7	5	51	39	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.991				0.961	
Flt Protected				0.996	0.966	
Satd. Flow (prot)	1723	0	0	1732	1672	0
Flt Permitted				0.996	0.966	
Satd. Flow (perm)	1723	0	0	1732	1672	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	8	5	55	42	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	126	0	0	60	59	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	109	7	5	51	39	16
Future Volume (Veh/h)	109	7	5	51	39	16
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	118	8	5	55	42	17
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	101	0	160	93	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	101	0	160	93	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	85	99	99	93	97	
cM capacity (veh/h)	769	1085	692	777	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	126	60	59
Volume Left	0	5	42
Volume Right	8	0	17
cSH	783	769	1623
Volume to Capacity	0.16	0.08	0.03
Queue Length 95th (m)	4.3	1.9	0.6
Control Delay (s/veh)	10.5	10.1	5.2
Lane LOS	B	B	A
Approach Delay (s/veh)	10.5	10.1	5.2
Approach LOS	B	B	

Intersection Summary				
Average Delay	9.1			
Intersection Capacity Utilization	16.8%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	138	193	78	19	1	287	4	72	9	6	66
Future Volume (vph)	17	138	193	78	19	1	287	4	72	9	6	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.925			0.999			0.973			0.891	
Flt Protected		0.998			0.962			0.962			0.994	
Satd. Flow (prot)	0	1662	0	0	1730	0	0	1685	0	0	1595	0
Flt Permitted		0.998			0.962			0.962			0.994	
Satd. Flow (perm)	0	1662	0	0	1730	0	0	1685	0	0	1595	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	150	210	85	21	1	312	4	78	10	7	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	378	0	0	107	0	0	394	0	0	89	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			

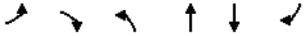
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	138	193	78	19	1	287	4	72	9	6	66
Future Volume (Veh/h)	17	138	193	78	19	1	287	4	72	9	6	66
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	150	210	85	21	1	312	4	78	10	7	72
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	22			360			558	483	255	563	588	22
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	22			329			532	455	221	537	563	22
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			93			19	99	90	97	98	93
cM capacity (veh/h)	1593			1198			384	448	797	372	389	1056

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	378	107	394	89
Volume Left	18	85	312	10
Volume Right	210	1	78	72
cSH	1593	1198	429	787
Volume to Capacity	0.01	0.07	0.92	0.11
Queue Length 95th (m)	0.3	1.7	77.3	2.9
Control Delay (s/veh)	0.4	6.7	56.8	10.2
Lane LOS	A	A	F	B
Approach Delay (s/veh)	0.4	6.7	56.8	10.2
Approach LOS			F	B

Intersection Summary				
Average Delay		25.0		
Intersection Capacity Utilization		62.6%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	6	2	39	86	2
Future Volume (vph)	2	6	2	39	86	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.895				0.997	
Flt Protected	0.989			0.998		
Satd. Flow (prot)	1539	0	0	1797	1795	0
Flt Permitted	0.989			0.998		
Satd. Flow (perm)	1539	0	0	1797	1795	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	7	2	42	93	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	0	0	44	95	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	6	2	39	86	2
Future Volume (Veh/h)	2	6	2	39	86	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	7	2	42	93	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	140	94	95			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	140	94	95			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	852	963	1499			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	9	44	95
Volume Left	2	2	0
Volume Right	7	0	2
cSH	936	1499	1700
Volume to Capacity	0.00*	0.00*	0.06
Queue Length 95th (m)	0.2	0.0	0.0
Control Delay (s/veh)	8.9	0.3	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.9	0.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	31	30	0	0	91	121	91	0	41	0
Future Volume (vph)	0	0	31	30	0	0	91	121	91	0	41	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.959				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	31	30	0	0	91	121	91	0	41	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	31	0	0	30	0	0	303	0	0	41	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	38.6%	ICU Level of Service A	
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	31	30	0	0	91	121	91	0	41	0
Future Volume (Veh/h)	0	0	31	30	0	0	91	121	91	0	41	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	31	30	0	0	91	121	91	0	41	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			31			96	76	16	227	91	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			31			96	76	16	227	91	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			89	85	91	100	95	100
cM capacity (veh/h)	1623			1582			839	799	1064	580	784	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	31	30	303	41
Volume Left	0	30	91	0
Volume Right	31	0	91	0
cSH	1623	1582	877	784
Volume to Capacity	0.00	0.02	0.35	0.05
Queue Length 95th (m)	0.0	0.4	11.8	1.3
Control Delay (s/veh)	0.0	7.3	11.3	9.8
Lane LOS		A	B	A
Approach Delay (s/veh)	0.0	7.3	11.3	9.8
Approach LOS			B	A

Intersection Summary				
Average Delay		10.0		
Intersection Capacity Utilization		38.6%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	10	27	82	26	0
Future Volume (vph)	0	10	27	82	26	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.850					
Flt Protected				0.988		
Satd. Flow (prot)	0	0	0	1861	1883	0
Flt Permitted				0.988		
Satd. Flow (perm)	0	0	0	1861	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			22.6	24.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	11	29	89	28	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	0	0	118	28	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	27	82	26	0
Future Volume (Veh/h)	0	10	27	82	26	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	11	29	89	28	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	175	28	28			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	175	28	28			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	98			
cM capacity (veh/h)	800	1047	1585			

Direction, Lane #	NB 1	SB 1
Volume Total	118	28
Volume Left	29	0
Volume Right	0	0
cSH	1585	1700
Volume to Capacity	0.02	0.02
Queue Length 95th (m)	0.4	0.0
Control Delay (s/veh)	1.9	0.0
Lane LOS	A	
Approach Delay (s/veh)	1.9	0.0
Approach LOS		

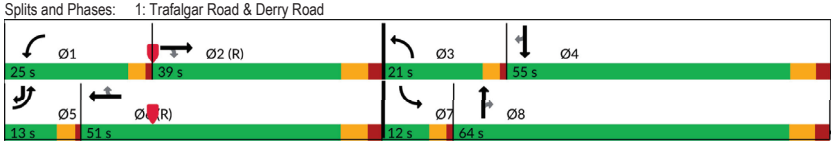
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
Future Volume (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			184			123			161			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
Shared Lane Traffic (%)												
Lane Group Flow (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	7.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	11.0
Total Split (s)	13.0	39.0	39.0	25.0	51.0	51.0	21.0	64.0	64.0	12.0	55.0	13.0
Total Split (%)	9.3%	27.9%	27.9%	17.9%	36.4%	36.4%	15.0%	45.7%	45.7%	8.6%	39.3%	9.3%
Maximum Green (s)	9.0	32.1	32.1	21.0	44.1	44.1	17.0	57.2	57.2	8.0	48.2	9.0
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	3.0
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	1.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	10.0	34.1	34.1	22.0	46.1	46.1	18.0	59.2	59.2	9.0	50.2	66.0
Actuated g/C Ratio	0.07	0.24	0.24	0.16	0.33	0.33	0.13	0.42	0.42	0.06	0.36	0.47
v/c Ratio	1.12	0.75	0.45	0.96	1.17	0.24	1.20	1.16	0.41	1.25	1.17	0.73
Control Delay (s/veh)	158.9	48.2	10.8	94.9	123.8	12.6	148.2	96.0	5.0	182.5	127.5	39.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	158.9	48.2	10.8	94.9	123.8	12.6	148.2	96.0	5.0	182.5	127.5	39.7
LOS	F	D	B	F	F	B	F	F	A	F	F	D
Approach Delay (s/veh)		62.8			112.0			95.2			113.2	
Approach LOS		E			F			F			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.25		
Intersection Signal Delay (s/veh): 100.0		Intersection LOS: F
Intersection Capacity Utilization 109.6%		ICU Level of Service H
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
v/c Ratio	1.12	0.75	0.45	0.96	1.17	0.24	1.20	1.16	0.41	1.25	1.17	0.73
Control Delay (s/veh)	158.9	48.2	10.8	94.9	123.8	12.6	148.2	96.0	5.0	182.5	127.5	39.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	158.9	48.2	10.8	94.9	123.8	12.6	148.2	96.0	5.0	182.5	127.5	39.7
Queue Length 50th (m)	~47.1	89.7	7.6	72.0	~241.2	2.6	~85.2	~296.8	21.0	~45.7	~263.6	138.3
Queue Length 95th (m)	#77.5	106.4	22.9	#113.0	#271.4	m19.5	m#80.5	m#272.0	m19.9	m#60.6	#299.0	m191.5
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	240	1240	521	550	1709	609	407	1798	755	205	1525	803
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.75	0.45	0.96	1.17	0.24	1.20	1.16	0.41	1.25	1.17	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
Future Volume (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	269	926	237	526	2007	148	488	2081	306	256	1783	588
RTOR Reduction (vph)	0	0	139	0	0	82	0	0	93	0	0	70
Lane Group Flow (vph)	269	926	98	526	2007	66	488	2081	213	256	1783	518
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.0	32.1	32.1	21.0	44.1	44.1	17.0	57.2	57.2	8.0	48.2	57.2
Effective Green, g (s)	10.0	34.1	34.1	22.0	46.1	46.1	18.0	59.2	59.2	9.0	50.2	61.2
Actuated g/C Ratio	0.07	0.24	0.24	0.16	0.33	0.33	0.13	0.42	0.42	0.06	0.36	0.44
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	4.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	240	1240	382	550	1709	527	407	1798	662	205	1525	684
v/s Ratio Prot	c0.08	0.18		0.15	c0.39		c0.15	c0.49		0.08	0.42	0.06
v/s Ratio Perm			0.06			0.04			0.14			0.27
v/c Ratio	1.12	0.75	0.26	0.96	1.17	0.12	1.20	1.16	0.32	1.25	1.17	0.76
Uniform Delay, d1	65.0	49.0	42.7	58.5	47.0	32.8	61.0	40.4	27.0	65.5	44.9	33.2
Progression Factor	1.18	0.90	0.70	1.26	0.98	1.43	1.04	0.54	0.36	0.97	1.21	1.54
Incremental Delay, d2	93.2	4.0	1.5	21.8	83.0	0.3	96.1	72.7	0.2	132.5	80.4	3.2
Delay (s)	170.2	47.9	31.7	95.5	128.9	47.3	159.4	94.5	9.8	195.9	134.8	54.3
Level of Service	F	D	C	F	F	D	F	F	A	F	F	D
Approach Delay (s/veh)		68.2			117.9			96.5			122.7	
Approach LOS		E			F			F			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	105.4	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.19			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	109.6%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

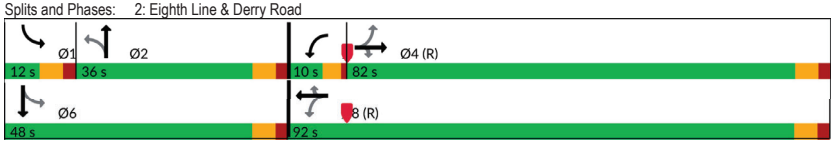
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1188	153	74	2322	11	129	17	96	31	45	10
Future Volume (vph)	13	1188	153	74	2322	11	129	17	96	31	45	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.873			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1672	0	1825	1869	0
Flt Permitted	0.045			0.155			0.721			0.455		
Satd. Flow (perm)	86	4520	1555	298	4565	1633	1385	1672	0	874	1869	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			153			70		96			6	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	13	1188	153	74	2322	11	129	17	96	31	45	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	1188	153	74	2322	11	129	113	0	31	55	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		11.0	36.0	
Total Split (s)	82.0	82.0	82.0	10.0	92.0	92.0	36.0	36.0		12.0	48.0	
Total Split (%)	58.6%	58.6%	58.6%	7.1%	65.7%	65.7%	25.7%	25.7%		8.6%	34.3%	
Maximum Green (s)	76.0	76.0	76.0	6.0	86.0	86.0	30.0	30.0		6.0	42.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0			0	
Act Effct Green (s)	92.6	92.6	92.6	103.9	101.9	101.9	18.3	18.3		26.1	26.1	
Actuated g/C Ratio	0.66	0.66	0.66	0.74	0.73	0.73	0.13	0.13		0.19	0.19	
v/c Ratio	0.23	0.40	0.14	0.25	0.70	0.01	0.71	0.37		0.15	0.16	
Control Delay (s/veh)	32.2	13.2	6.2	8.7	13.9	0.0	69.8	19.9		43.2	38.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	32.2	13.2	6.2	8.7	13.9	0.0	69.8	19.9		43.2	38.9	
LOS	C	B	A	A	B	A	E	B		D	D	
Approach Delay (s/veh)		12.6			13.7			46.5			40.5	
Approach LOS		B			B			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.71		
Intersection Signal Delay (s/veh): 15.8		Intersection LOS: B
Intersection Capacity Utilization 85.3%		ICU Level of Service E
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	13	1188	153	74	2322	11	129	113	31	55
v/c Ratio	0.23	0.40	0.14	0.25	0.70	0.01	0.71	0.37	0.15	0.16
Control Delay (s/veh)	32.2	13.2	6.2	8.7	13.9	0.0	69.8	19.9	43.2	38.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	32.2	13.2	6.2	8.7	13.9	0.0	69.8	19.9	43.2	38.9
Queue Length 50th (m)	1.5	63.3	7.7	5.8	157.0	0.0	36.8	17.1	6.8	10.9
Queue Length 95th (m)	m7.3	134.6	m19.1	12.4	205.3	0.0	56.9	30.7	14.6	21.2
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	56	2989	1080	300	3322	1207	296	433	208	564
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.40	0.14	0.25	0.70	0.01	0.44	0.26	0.15	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	1188	153	74	2322	11	129	17	96	31	45	10
Future Volume (vph)	13	1188	153	74	2322	11	129	17	96	31	45	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1671		1825	1869	
Flt Permitted	0.04	1.00	1.00	0.15	1.00	1.00	0.72	1.00		0.45	1.00	
Satd. Flow (perm)	86	4520	1555	298	4565	1633	1385	1671		874	1869	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	1188	153	74	2322	11	129	17	96	31	45	10
RTOR Reduction (vph)	0	0	55	0	0	3	0	83	0	0	5	0
Lane Group Flow (vph)	13	1188	98	74	2322	8	129	30	0	31	50	0
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	89.4	89.4	89.4	99.5	99.5	99.5	18.3	18.3		28.5	28.5	
Effective Green, g (s)	89.4	89.4	89.4	99.5	99.5	99.5	18.3	18.3		28.5	28.5	
Actuated g/C Ratio	0.64	0.64	0.64	0.71	0.71	0.71	0.13	0.13		0.20	0.20	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	54	2886	992	278	3244	1160	181	218		206	380	
v/s Ratio Prot		0.26		0.01	c0.51			0.02		0.00	c0.03	
v/s Ratio Perm	0.15		0.06	0.18		0.00	c0.09			0.03		
v/c Ratio	0.24	0.41	0.10	0.27	0.72	0.01	0.71	0.14		0.15	0.13	
Uniform Delay, d1	10.8	12.4	9.8	7.4	11.9	5.9	58.3	53.9		45.4	45.6	
Progression Factor	1.23	0.98	2.81	1.00	1.00	1.00	0.86	1.25		1.00	1.00	
Incremental Delay, d2	9.2	0.4	0.2	0.5	1.4	0.0	12.0	0.3		0.3	0.2	
Delay (s)	22.6	12.6	27.6	7.9	13.3	5.9	62.1	67.6		45.8	45.8	
Level of Service	C	B	C	A	B	A	E	E		D	D	
Approach Delay (s/veh)		14.4			13.1			64.6			45.8	
Approach LOS		B			B			E			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	17.3	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.72				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		22.0	
Intersection Capacity Utilization	85.3%	ICU Level of Service		E	
Analysis Period (min)	15				

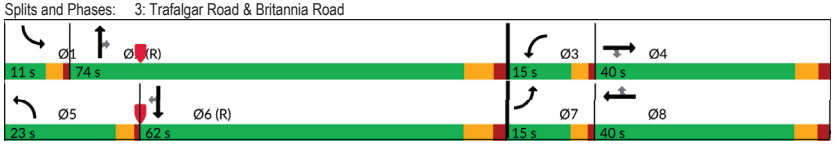
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
Future Volume (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			210			125			134			203
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
Shared Lane Traffic (%)												
Lane Group Flow (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	15.0	40.0	40.0	15.0	40.0	40.0	23.0	74.0	74.0	11.0	62.0	62.0
Total Split (%)	10.7%	28.6%	28.6%	10.7%	28.6%	28.6%	16.4%	52.9%	52.9%	7.9%	44.3%	44.3%
Maximum Green (s)	11.0	34.0	34.0	11.0	34.0	34.0	19.0	67.0	67.0	7.0	55.0	55.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	12.0	35.6	35.6	11.7	35.3	35.3	20.7	69.3	69.3	8.4	57.0	57.0
Actuated g/C Ratio	0.09	0.25	0.25	0.08	0.25	0.25	0.15	0.50	0.50	0.06	0.41	0.41
v/c Ratio	1.40	0.65	0.47	0.64	0.87	0.34	1.30	1.02	0.28	0.77	1.21	0.93
Control Delay (s/veh)	247.3	49.8	13.0	92.4	44.8	5.4	171.5	63.7	18.4	95.9	121.4	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	247.3	49.8	13.0	92.4	44.8	5.4	171.5	63.7	18.4	95.9	121.4	22.9
LOS	F	D	B	F	D	A	F	E	B	F	F	C
Approach Delay (s/veh)		95.4			46.8			81.9			97.1	
Approach LOS		F			D			F			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green		
Natural Cycle: 145		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.40		
Intersection Signal Delay (s/veh): 83.7	Intersection LOS: F	
Intersection Capacity Utilization 102.2%	ICU Level of Service G	
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 3: Trafalgar Road & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
v/c Ratio	1.40	0.65	0.47	0.64	0.87	0.34	1.30	1.02	0.28	0.77	1.21	0.93
Control Delay (s/veh)	247.3	49.8	13.0	92.4	44.8	5.4	171.5	63.7	18.4	95.9	121.4	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	247.3	49.8	13.0	92.4	44.8	5.4	171.5	63.7	18.4	95.9	121.4	22.9
Queue Length 50th (m)	~78.6	78.7	11.6	25.8	112.3	1.9	~115.4	~287.6	36.5	20.1	~315.2	146.2
Queue Length 95th (m)	#114.3	96.0	37.0	41.8	93.0	7.6	m#107.2	m264.2	m33.4	m21.0	m#279.3	m127.5
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	261	1150	563	303	1173	489	473	2147	842	186	1748	745
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.40	0.65	0.47	0.62	0.85	0.33	1.30	1.02	0.28	0.77	1.21	0.93

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
Future Volume (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	366	744	263	189	998	162	615	2200	237	143	2112	692
RTOR Reduction (vph)	0	0	157	0	0	93	0	0	68	0	0	120
Lane Group Flow (vph)	366	744	106	189	998	69	615	2200	169	143	2112	572
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	33.6	33.6	10.7	33.3	33.3	19.7	67.3	67.3	7.4	55.0	55.0
Effective Green, g (s)	12.0	35.6	35.6	11.7	35.3	35.3	20.7	69.3	69.3	8.4	57.0	57.0
Actuated g/C Ratio	0.09	0.25	0.25	0.08	0.25	0.25	0.15	0.50	0.50	0.06	0.41	0.41
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	261	1138	403	295	1151	388	473	2146	775	186	1748	625
v/s Ratio Prot	c0.12	0.17		0.05	c0.22		c0.19	0.51		0.05	c0.49	
v/s Ratio Perm			0.07			0.04			0.11			0.37
v/c Ratio	1.40	0.65	0.26	0.64	0.87	0.18	1.30	1.03	0.22	0.77	1.21	0.91
Uniform Delay, d1	64.0	46.7	41.7	62.1	50.1	41.0	59.7	35.4	20.0	64.8	41.5	39.2
Progression Factor	1.00	1.00	1.00	1.33	0.73	0.32	0.68	1.48	2.10	1.32	0.59	0.43
Incremental Delay, d2	202.5	1.4	0.4	4.3	6.5	0.2	136.6	13.8	0.1	7.3	96.0	9.6
Delay (s)	266.5	48.1	42.1	87.0	42.9	13.1	177.2	66.0	42.1	93.1	120.6	26.6
Level of Service	F	D	D	F	D	B	F	E	D	F	F	C
Approach Delay (s/veh)		105.1			45.5			86.6			97.2	
Approach LOS		F			D			F			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	86.7	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.14			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	102.2%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

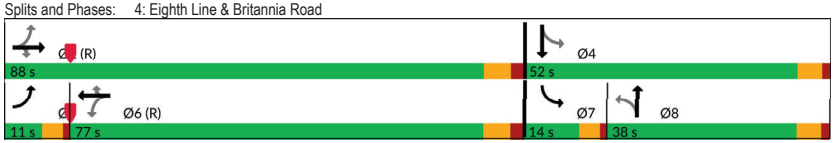
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	991	17	32	1267	58	53	151	61	94	154	57
Future Volume (vph)	20	991	17	32	1267	58	53	151	61	94	154	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.957			0.959	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1818	0	1825	1790	0
Flt Permitted	0.133			0.240			0.626			0.265		
Satd. Flow (perm)	256	4476	1328	461	4520	1633	1203	1818	0	509	1790	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		14			14	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	20	991	17	32	1267	58	53	151	61	94	154	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	991	17	32	1267	58	53	212	0	94	211	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	11.0	88.0	88.0	77.0	77.0	77.0	38.0	38.0		14.0	52.0	
Total Split (%)	7.9%	62.9%	62.9%	55.0%	55.0%	55.0%	27.1%	27.1%		10.0%	37.1%	
Maximum Green (s)	6.5	81.2	81.2	70.2	70.2	70.2	32.3	32.3		9.5	46.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	95.2	92.9	92.9	86.4	86.4	86.4	21.0	21.0		35.8	34.6	
Actuated g/C Ratio	0.68	0.66	0.66	0.62	0.62	0.62	0.15	0.15		0.26	0.25	
v/c Ratio	0.08	0.33	0.02	0.11	0.45	0.06	0.29	0.75		0.44	0.47	
Control Delay (s/veh)	5.9	5.8	0.1	15.8	16.3	1.0	53.7	66.7		38.6	37.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.9	5.8	0.1	15.8	16.3	1.0	53.7	66.7		38.6	37.6	
LOS	A	A	A	B	B	A	D	E		D	D	
Approach Delay (s/veh)		5.7			15.6			64.1			37.9	
Approach LOS		A			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 18.8		Intersection LOS: B	
Intersection Capacity Utilization 66.8%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	20	991	17	32	1267	58	53	212	94	211
v/c Ratio	0.08	0.33	0.02	0.11	0.45	0.06	0.29	0.75	0.44	0.47
Control Delay (s/veh)	5.9	5.8	0.1	15.8	16.3	1.0	53.7	66.7	38.6	37.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.9	5.8	0.1	15.8	16.3	1.0	53.7	66.7	38.6	37.6
Queue Length 50th (m)	0.7	17.8	0.0	3.8	81.2	0.0	12.0	49.7	19.1	43.5
Queue Length 95th (m)	m1.4	23.5	m0.0	10.6	109.2	2.4	24.0	74.4	24.9	50.2
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	247	2969	899	284	2788	1042	277	430	219	601
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.33	0.02	0.11	0.45	0.06	0.19	0.49	0.43	0.35

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	991	17	32	1267	58	53	151	61	94	154	57
Future Volume (vph)	20	991	17	32	1267	58	53	151	61	94	154	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1817		1825	1791	
Flt Permitted	0.13	1.00	1.00	0.24	1.00	1.00	0.63	1.00		0.27	1.00	
Satd. Flow (perm)	255	4476	1328	462	4520	1633	1202	1817		509	1791	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	991	17	32	1267	58	53	151	61	94	154	57
RTOR Reduction (vph)	0	0	6	0	0	23	0	12	0	0	11	0
Lane Group Flow (vph)	20	991	11	32	1267	35	53	200	0	94	200	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	92.9	92.9	92.9	84.6	84.6	84.6	21.0	21.0		34.6	34.6	
Effective Green, g (s)	92.9	92.9	92.9	84.6	84.6	84.6	21.0	21.0		34.6	34.6	
Actuated g/C Ratio	0.66	0.66	0.66	0.60	0.60	0.60	0.15	0.15		0.25	0.25	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	211	2970	881	279	2731	986	180	272		211	442	
v/s Ratio Prot	0.00	c0.22			c0.28			c0.11		0.03	c0.11	
v/s Ratio Perm	0.06		0.01	0.07		0.02	0.04			0.08		
v/c Ratio	0.09	0.33	0.01	0.11	0.46	0.04	0.29	0.74		0.45	0.45	
Uniform Delay, d1	9.6	10.2	8.0	11.8	15.2	11.2	52.9	56.8		42.7	44.7	
Progression Factor	0.61	0.51	1.00	1.00	1.00	1.00	0.97	0.97		0.82	0.84	
Incremental Delay, d2	0.2	0.2	0.0	0.8	0.6	0.1	0.9	9.7		1.5	0.7	
Delay (s)	6.0	5.5	8.0	12.6	15.8	11.3	52.0	64.7		36.3	38.1	
Level of Service	A	A	A	B	B	B	D	E		D	D	
Approach Delay (s/veh)		5.5			15.5			62.2			37.6	
Approach LOS		A			B			E			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	18.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	21.5	
Intersection Capacity Utilization	66.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

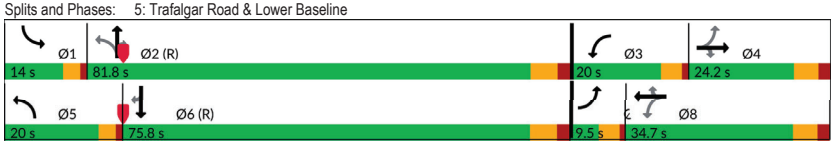
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
Future Volume (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	3579	1570	1807	3614	1585	1745	4378	1581	3319	4295	1551
Flt Permitted	0.359			0.213			0.055			0.950		
Satd. Flow (perm)	663	3579	1570	405	3614	1585	101	4378	1581	3319	4295	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161			153			209			157
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	7.0	10.0	10.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2	24.2	11.5	24.2	24.2	11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	24.2	24.2	20.0	34.7	34.7	20.0	81.8	81.8	14.0	75.8	75.8
Total Split (%)	6.8%	17.3%	17.3%	14.3%	24.8%	24.8%	14.3%	58.4%	58.4%	10.0%	54.1%	54.1%
Maximum Green (s)	5.0	18.0	18.0	15.5	28.5	28.5	16.0	75.2	75.2	10.0	69.2	69.2
Yellow Time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.4	19.7	19.7	40.4	32.1	32.1	93.1	77.2	77.2	11.3	71.2	71.2
Actuated g/C Ratio	0.19	0.14	0.14	0.29	0.23	0.23	0.67	0.55	0.55	0.08	0.51	0.51
v/c Ratio	0.41	0.74	0.17	1.18	0.64	0.91	1.15	1.08	0.40	1.19	1.03	0.11
Control Delay (s/veh)	45.9	67.1	1.0	150.7	46.6	50.9	140.6	75.5	9.1	145.8	34.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.9	67.1	1.0	150.7	46.6	50.9	140.6	75.5	9.1	145.8	34.1	0.2
LOS	D	E	A	F	D	D	F	E	A	F	C	A
Approach Delay (s/veh)		56.1			74.6			73.8			46.2	
Approach LOS		E			E			E			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 25 (18%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.19		
Intersection Signal Delay (s/veh): 63.3	Intersection LOS: E	
Intersection Capacity Utilization 103.3%	ICU Level of Service G	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
v/c Ratio	0.41	0.74	0.17	1.18	0.64	0.91	1.15	1.08	0.40	1.19	1.03	0.11
Control Delay (s/veh)	45.9	67.1	1.0	150.7	46.6	50.9	140.6	75.5	9.1	145.8	34.1	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.9	67.1	1.0	150.7	46.6	50.9	140.6	75.5	9.1	145.8	34.1	0.2
Queue Length 50th (m)	14.8	53.2	0.0	~85.0	61.9	86.4	~85.7	~343.6	25.3	~57.1	~280.0	0.0
Queue Length 95th (m)	27.6	71.2	0.0	#152.0	67.6	#101.5	#144.6	#373.7	47.4	m#50.8	m62.9	m0.0
Internal Link Dist (m)		1293.1			1410.4			889.5			3062.5	
Turn Bay Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Base Capacity (vph)	172	511	362	281	829	481	269	2414	965	266	2184	865
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.73	0.17	1.18	0.64	0.91	1.15	1.08	0.40	1.19	1.03	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
Future Volume (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1755	3579	1570	1807	3614	1585	1745	4378	1581	3319	4295	1551
Flt Permitted	0.36	1.00	1.00	0.21	1.00	1.00	0.06	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	663	3579	1570	405	3614	1585	102	4378	1581	3319	4295	1551
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	70	371	61	332	531	439	310	2609	389	316	2249	95
RTOR Reduction (vph)	0	0	52	0	0	118	0	0	95	0	0	47
Lane Group Flow (vph)	70	371	9	332	531	321	310	2609	294	316	2249	48
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Actuated Green, G (s)	22.6	18.6	18.6	38.6	30.1	30.1	88.6	74.3	74.3	10.3	68.3	68.3
Effective Green, g (s)	24.6	20.6	20.6	39.6	32.1	32.1	89.6	76.3	76.3	11.3	70.3	70.3
Actuated g/C Ratio	0.18	0.15	0.15	0.28	0.23	0.23	0.64	0.54	0.54	0.08	0.50	0.50
Clearance Time (s)	4.5	6.2	6.2	4.5	6.2	6.2	4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	155	526	231	279	828	363	268	2386	861	267	2156	778
v/s Ratio Prot	0.02	0.10		c0.14	0.15		c0.14	0.60		0.10	0.52	
v/s Ratio Perm	0.06		0.01	c0.20		0.20	c0.60		0.19			0.03
v/c Ratio	0.45	0.71	0.04	1.19	0.64	0.88	1.16	1.09	0.34	1.18	1.04	0.06
Uniform Delay, d1	49.6	56.8	51.2	45.0	48.7	52.2	49.4	31.9	17.8	64.4	34.9	17.9
Progression Factor	1.00	1.00	1.00	1.10	0.87	0.80	1.00	1.00	1.00	1.11	0.50	5.51
Incremental Delay, d2	2.1	5.4	0.1	113.2	2.1	21.4	104.1	49.5	1.1	86.3	21.1	0.0
Delay (s)	51.7	62.2	51.4	162.5	44.5	63.0	153.5	81.4	18.9	157.9	38.4	98.6
Level of Service	D	E	D	F	D	E	F	F	B	F	D	F
Approach Delay (s/veh)		59.4			80.8			80.8			54.7	
Approach LOS		E			F			F			D	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	70.5	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.20			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	103.3%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

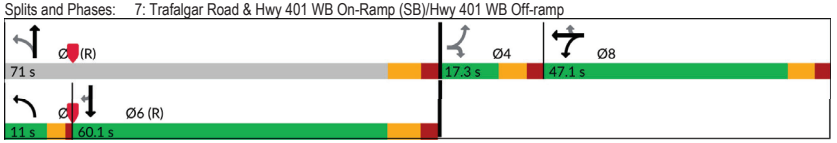
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	18	812	27	1396	8	1230	0	0	1073	45
Future Volume (vph)	17	0	18	812	27	1396	8	1230	0	0	1073	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	4309	0	0	4350	1306
Flt Permitted	0.625			0.950			0.094					
Satd. Flow (perm)	1201	0	1633	3372	1921	2737	181	4309	0	0	4350	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			253						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Adj. Flow (vph)	17	0	18	812	27	1396	8	1230	0	0	1073	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	18	812	27	1396	8	1230	0	0	1073	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.4		10.4	58.4	58.4	58.4	55.2	51.1			48.9	48.9
Actuated g/C Ratio	0.08		0.08	0.43	0.43	0.43	0.41	0.38			0.36	0.36
v/c Ratio	0.18		0.07	0.56	0.03	1.06	0.05	0.76			0.68	0.08
Control Delay (s/veh)	63.2		0.6	33.8	29.3	71.7	21.4	39.7			39.1	0.3
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.2		0.6	33.8	29.3	71.7	21.4	39.7			39.1	0.3
LOS	E		A	C	C	E	C	D			D	A
Approach Delay (s/veh)		31.0			57.4			39.6			37.5	
Approach LOS		C			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay (s/veh): 47.7		Intersection LOS: D	
Intersection Capacity Utilization 91.9%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp

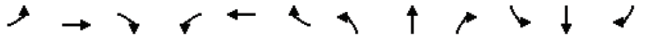


Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	18	812	27	1396	8	1230	1073	45
v/c Ratio	0.18	0.07	0.56	0.03	1.06	0.05	0.76	0.68	0.08
Control Delay (s/veh)	63.2	0.6	33.8	29.3	71.7	21.4	39.7	39.1	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.2	0.6	33.8	29.3	71.7	21.4	39.7	39.1	0.3
Queue Length 50th (m)	4.4	0.0	93.0	4.4	~233.1	1.3	126.4	103.9	0.0
Queue Length 95th (m)	12.2	0.0	133.9	12.5	#316.8	4.0	128.2	123.6	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	92	245	1452	827	1323	158	2003	1676	579
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.07	0.56	0.03	1.06	0.05	0.61	0.64	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	18	812	27	1396	8	1230	0	0	1073	45
Future Volume (vph)	17	0	18	812	27	1396	8	1230	0	0	1073	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	4309			4350	1306
Flt Permitted	0.63		1.00	0.95	1.00	1.00	0.09	1.00			1.00	1.00
Satd. Flow (perm)	1201		1633	3372	1921	2737	181	4309			4350	1306
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	18	812	27	1396	8	1230	0	0	1073	45
RTOR Reduction (vph)	0	0	17	0	0	144	0	0	0	0	0	31
Lane Group Flow (vph)	17	0	1	812	27	1252	8	1230	0	0	1073	14
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.4		6.4	58.4	58.4	58.4	48.2	48.2			42.8	42.8
Effective Green, g (s)	6.4		6.4	58.4	58.4	58.4	48.2	48.2			42.8	42.8
Actuated g/C Ratio	0.05		0.05	0.43	0.43	0.43	0.36	0.36			0.32	0.32
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		77	1453	827	1179	81	1532			1374	412
v/s Ratio Prot				0.24	0.01		0.00	c0.29			0.25	
v/s Ratio Perm	c0.01		0.00			c0.46	0.03					0.01
v/c Ratio	0.30		0.01	0.56	0.03	1.06	0.10	0.80			0.78	0.03
Uniform Delay, d1	62.4		61.5	28.9	22.2	38.6	30.9	39.4			42.1	32.1
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.1		0.1	0.3	0.0	44.3	0.2	4.6			4.5	0.2
Delay (s)	65.4		61.6	29.2	22.3	82.9	31.1	43.9			46.6	32.2
Level of Service	E		E	C	C	F	C	D			D	C
Approach Delay (s/veh)		63.5			62.6			43.8			46.0	
Approach LOS		E			E			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	53.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

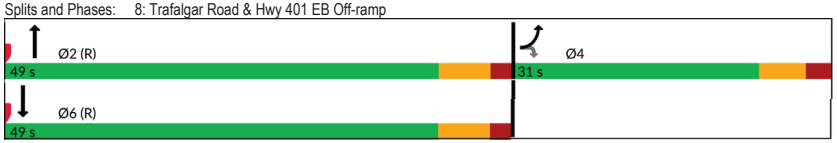
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	673	0	1710	1443	0
Future Volume (vph)	147	673	0	1710	1443	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.896	0.850				
Flt Protected	0.985					
Satd. Flow (prot)	2937	1327	0	4309	4350	0
Flt Permitted	0.985					
Satd. Flow (perm)	2937	1327	0	4309	4350	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	26	26				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Adj. Flow (vph)	147	673	0	1710	1443	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	484	336	0	1710	1443	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	22.2	22.2		43.8	43.8	
Actuated g/C Ratio	0.28	0.28		0.55	0.55	
v/c Ratio	0.58	0.87		0.72	0.61	
Control Delay (s/veh)	26.2	48.8		16.4	14.1	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	26.2	48.8		16.4	14.1	
LOS	C	D		B	B	
Approach Delay (s/veh)	35.4			16.4	14.1	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 19.5		Intersection LOS: B	
Intersection Capacity Utilization 67.3%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	484	336	1710	1443
v/c Ratio	0.58	0.87	0.72	0.61
Control Delay (s/veh)	26.2	48.8	16.4	14.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.2	48.8	16.4	14.1
Queue Length 50th (m)	31.3	50.4	88.8	67.2
Queue Length 95th (m)	47.9	#103.7	105.8	80.5
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	911	421	2377	2400
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.53	0.80	0.72	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	673	0	1710	1443	0
Future Volume (vph)	147	673	0	1710	1443	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.99	1.00		1.00	1.00	
Satd. Flow (prot)	2936	1327		4309	4350	
Flt Permitted	0.99	1.00		1.00	1.00	
Satd. Flow (perm)	2936	1327		4309	4350	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	673	0	1710	1443	0
RTOR Reduction (vph)	19	19	0	0	0	0
Lane Group Flow (vph)	465	317	0	1710	1443	0
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	22.2	22.2		43.8	43.8	
Effective Green, g (s)	22.2	22.2		43.8	43.8	
Actuated g/C Ratio	0.28	0.28		0.55	0.55	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	814	368		2359	2381	
v/s Ratio Prot	0.16			c0.40	0.33	
v/s Ratio Perm		c0.24				
v/c Ratio	0.57	0.86		0.72	0.61	
Uniform Delay, d1	24.8	27.4		13.6	12.3	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	18.3		2.0	1.2	
Delay (s)	25.8	45.8		15.6	13.4	
Level of Service	C	D		B	B	
Approach Delay (s/veh)	34.0			15.6	13.4	
Approach LOS	C			B	B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		

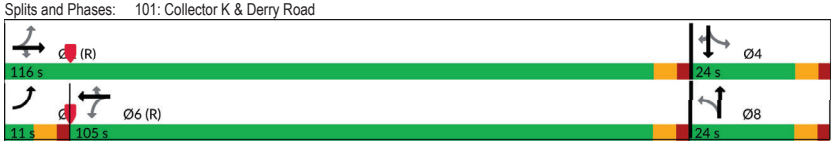
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	1404	221	21	3324	13	152	0	6	25	0	8
Future Volume (vph)	57	1404	221	21	3324	13	152	0	6	25	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.039			0.180			0.757			0.754		
Satd. Flow (perm)	73	5142	1601	339	5142	1601	1426	1601	0	1420	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221			70		102				70
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	57	1404	221	21	3324	13	152	0	6	25	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	1404	221	21	3324	13	152	6	0	25	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	116.0	116.0	105.0	105.0	105.0	24.0	24.0		24.0	24.0	24.0
Total Split (%)	7.9%	82.9%	82.9%	75.0%	75.0%	75.0%	17.1%	17.1%		17.1%	17.1%	17.1%
Maximum Green (s)	5.0	110.0	110.0	99.0	99.0	99.0	18.0	18.0		18.0	18.0	18.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		Max	Max	Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	107.8	107.8	107.8	99.0	99.0	99.0	20.2	20.2		20.2		20.2
Actuated g/C Ratio	0.77	0.77	0.77	0.71	0.71	0.71	0.14	0.14		0.14		0.14
v/c Ratio	0.49	0.35	0.17	0.09	0.91	0.01	0.74	0.02		0.12		0.03
Control Delay (s/veh)	25.6	5.3	0.7	3.4	10.4	0.0	79.9	0.2		56.0		0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	25.6	5.3	0.7	3.4	10.4	0.0	79.9	0.2		56.0		0.1
LOS	C	A	A	A	B	A	E	A		E		A
Approach Delay (s/veh)		5.4			10.3			76.8			42.4	
Approach LOS		A			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 10.9		Intersection LOS: B	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	57	1404	221	21	3324	13	152	6	25	8
v/c Ratio	0.49	0.35	0.17	0.09	0.91	0.01	0.74	0.02	0.12	0.03
Control Delay (s/veh)	25.6	5.3	0.7	3.4	10.4	0.0	79.9	0.2	56.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.6	5.3	0.7	3.4	10.4	0.0	79.9	0.2	56.0	0.1
Queue Length 50th (m)	3.0	36.4	0.0	0.9	61.3	0.0	42.3	0.0	6.3	0.0
Queue Length 95th (m)	14.3	41.5	4.9	m0.9	m50.7	m0.0	#80.7	0.0	15.6	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	117	4040	1305	239	3636	1152	205	318	204	290
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.35	0.17	0.09	0.91	0.01	0.74	0.02	0.12	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	1404	221	21	3324	13	152	0	6	25	0	8
Future Volume (vph)	57	1404	221	21	3324	13	152	0	6	25	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601		1789		1601
Flt Permitted	0.04	1.00	1.00	0.18	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	73	5142	1601	338	5142	1601	1426	1601		1420		1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	57	1404	221	21	3324	13	152	0	6	25	0	8
RTOR Reduction (vph)	0	0	51	0	0	4	0	5	0	0	0	7
Lane Group Flow (vph)	57	1404	170	21	3324	9	152	1	0	25	0	1
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	107.8	107.8	107.8	97.8	97.8	97.8	20.2	20.2		20.2		20.2
Effective Green, g (s)	107.8	107.8	107.8	97.8	97.8	97.8	20.2	20.2		20.2		20.2
Actuated g/C Ratio	0.77	0.77	0.77	0.70	0.70	0.70	0.14	0.14		0.14		0.14
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	105	3959	1232	236	3592	1118	205	231		204		231
v/s Ratio Prot	0.02	c0.27			c0.65			0.00				
v/s Ratio Perm	0.40		0.11	0.06		0.01	c0.11			0.02		0.00
v/c Ratio	0.54	0.35	0.14	0.09	0.93	0.01	0.74	0.00		0.12		0.00
Uniform Delay, d1	35.3	5.1	4.1	6.8	18.0	6.4	57.4	51.3		52.2		51.3
Progression Factor	1.00	1.00	1.00	0.48	0.52	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	5.6	0.2	0.2	0.2	1.4	0.0	13.5	0.0		1.2		0.0
Delay (s)	41.0	5.3	4.4	3.4	10.7	6.4	70.9	51.3		53.4		51.3
Level of Service	D	A	A	A	B	A	E	D		D		D
Approach Delay (s/veh)		6.4			10.7			70.1			52.9	
Approach LOS		A			B			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	11.4	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.89				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	91.8%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1408	223	0	2617	10	0	0	92	0	0	60
Future Volume (vph)	0	1408	223	0	2617	10	0	0	92	0	0	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1408	223	0	2617	10	0	0	92	0	0	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1408	223	0	2627	0	0	0	92	0	0	60
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1408	223	0	2617	10	0	0	92	0	0	60
Future Volume (Veh/h)	0	1408	223	0	2617	10	0	0	92	0	0	60
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1408	223	0	2617	10	0	0	92	0	0	60
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.65			0.85			0.73	0.73	0.85	0.73	0.73	0.65
vC, conflicting volume	2627			1631			2340	4035	469	3183	4253	877
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1626			1107			108	2433	0	1264	2732	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	90	100	100	92
cM capacity (veh/h)	258			530			573	23	917	83	15	707

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	469	469	469	223	1047	1047	533	92	60
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	223	0	0	10	92	60
cSH	1700	1700	1700	1700	1700	1700	1700	917	707
Volume to Capacity	0.28	0.28	0.28	0.13	0.62	0.62	0.31	0.10	0.08
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.1
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	10.6
Lane LOS								A	B
Approach Delay (s/veh)	0.0				0.0			9.4	10.6
Approach LOS								A	B

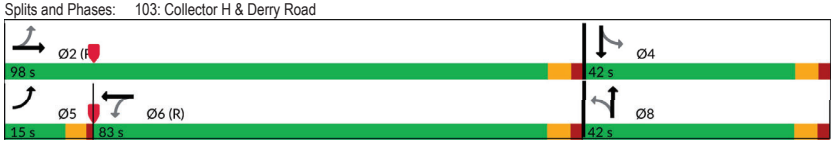
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	61.2%	ICU Level of Service		B
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	1334	129	29	2550	14	108	0	14	32	20	57
Future Volume (vph)	74	1334	129	29	2550	14	108	0	14	32	20	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.999			0.985			0.929	
Flt Protected	0.950			0.950				0.958			0.986	
Satd. Flow (prot)	1789	4461	0	1789	4516	0	0	1777	0	0	1725	0
Flt Permitted	0.037			0.136				0.555			0.920	
Satd. Flow (perm)	70	4461	0	256	4516	0	0	1030	0	0	1610	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			1			58			38	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	74	1334	129	29	2550	14	108	0	14	32	20	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	74	1463	0	29	2564	0	0	122	0	0	109	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	9.5	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	15.0	98.0		83.0	83.0		42.0	42.0		42.0	42.0	
Total Split (%)	10.7%	70.0%		59.3%	59.3%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	10.5	92.0		77.0	77.0		36.0	36.0		36.0	36.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)		9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	115.2	113.7		104.1	104.1			14.3			14.3	
Actuated g/C Ratio	0.82	0.81		0.74	0.74			0.10			0.10	
v/c Ratio	0.51	0.40		0.15	0.76			0.78			0.55	
Control Delay (s/veh)	35.6	5.9		11.2	13.3			63.1			46.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	35.6	5.9		11.2	13.3			63.1			46.2	
LOS	D	A		B	B			E			D	
Approach Delay (s/veh)		7.3			13.3			63.1			46.2	
Approach LOS		A			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay (s/veh): 13.4		Intersection LOS: B	
Intersection Capacity Utilization 81.0%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	74	1463	29	2564	122	109
v/c Ratio	0.51	0.40	0.15	0.76	0.78	0.55
Control Delay (s/veh)	35.6	5.9	11.2	13.3	63.1	46.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.6	5.9	11.2	13.3	63.1	46.2
Queue Length 50th (m)	12.0	43.9	3.3	154.7	18.0	19.4
Queue Length 95th (m)	m20.9	m53.6	m4.1	133.4	39.1	m37.6
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	186	3627	190	3357	307	442
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.40	0.15	0.76	0.40	0.25

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	1334	129	29	2550	14	108	0	14	32	20	57
Future Volume (vph)	74	1334	129	29	2550	14	108	0	14	32	20	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.98			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4460		1789	4517			1776			1725	
Flt Permitted	0.04	1.00		0.14	1.00			0.56			0.92	
Satd. Flow (perm)	70	4460		256	4517			1030			1610	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	74	1334	129	29	2550	14	108	0	14	32	20	57
RTOR Reduction (vph)	0	4	0	0	0	0	0	52	0	0	34	0
Lane Group Flow (vph)	74	1459	0	29	2564	0	0	70	0	0	75	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	113.7	113.7		103.2	103.2			14.3			14.3	
Effective Green, g (s)	113.7	113.7		103.2	103.2			14.3			14.3	
Actuated g/C Ratio	0.81	0.81		0.74	0.74			0.10			0.10	
Clearance Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	130	3622		188	3329			105			164	
v/s Ratio Prot	c0.02	0.33			c0.57							
v/s Ratio Perm	0.44			0.11				c0.07			0.05	
v/c Ratio	0.57	0.40		0.15	0.77			0.67			0.46	
Uniform Delay, d1	25.0	3.7		5.5	11.2			60.5			59.2	
Progression Factor	1.48	1.42		1.23	0.96			1.00			0.95	
Incremental Delay, d2	4.3	0.3		1.2	1.2			14.8			2.0	
Delay (s)	41.3	5.5		7.9	12.0			75.4			58.1	
Level of Service	D	A		A	B			E			E	
Approach Delay (s/veh)		7.2			11.9			75.4			58.1	
Approach LOS		A			B			E			E	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.75				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		16.5	
Intersection Capacity Utilization	81.0%	ICU Level of Service		D	
Analysis Period (min)	15				

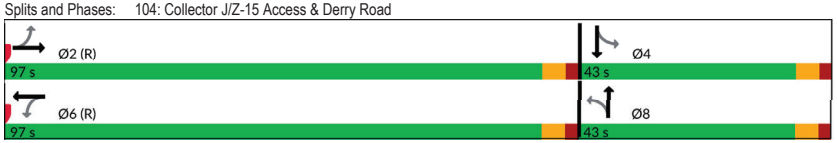
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	1315	213	18	2406	19	144	0	20	42	0	158
Future Volume (vph)	51	1315	213	18	2406	19	144	0	20	42	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.979			0.999			0.984			0.893	
Flt Protected	0.950			0.950				0.958			0.990	
Satd. Flow (prot)	1789	4425	0	1789	4516	0	0	1775	0	0	1665	0
Flt Permitted	0.039			0.108				0.455			0.920	
Satd. Flow (perm)	73	4425	0	203	4516	0	0	843	0	0	1547	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		37			1			23			23	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	1315	213	18	2406	19	144	0	20	42	0	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	51	1528	0	18	2425	0	0	164	0	0	200	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	97.0	97.0		97.0	97.0		43.0	43.0		43.0	43.0	
Total Split (%)	69.3%	69.3%		69.3%	69.3%		30.7%	30.7%		30.7%	30.7%	
Maximum Green (s)	91.0	91.0		91.0	91.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	102.3	102.3		102.3	102.3			25.7			25.7	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.18			0.18	
v/c Ratio	0.96	0.47		0.12	0.74			0.95			0.66	
Control Delay (s/veh)	145.1	5.1		15.7	16.5			102.6			56.0	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	145.1	5.1		15.7	16.5			102.6			56.0	
LOS	F	A		B	B			F			E	
Approach Delay (s/veh)		9.6			16.5			102.6			56.0	
Approach LOS		A			B			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay (s/veh): 19.0		Intersection LOS: B	
Intersection Capacity Utilization 83.2%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	51	1528	18	2425	164	200
v/c Ratio	0.96	0.47	0.12	0.74	0.95	0.66
Control Delay (s/veh)	145.1	5.1	15.7	16.5	102.6	56.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	145.1	5.1	15.7	16.5	102.6	56.0
Queue Length 50th (m)	8.7	60.5	1.3	98.4	40.2	46.7
Queue Length 95th (m)	#43.0	76.3	m4.8	239.2	#67.4	66.7
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	53	3242	148	3298	239	425
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.47	0.12	0.74	0.69	0.47

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	1315	213	18	2406	19	144	0	20	42	0	158
Future Volume (vph)	51	1315	213	18	2406	19	144	0	20	42	0	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.98			0.89	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4426		1789	4515			1775			1665	
Flt Permitted	0.04	1.00		0.11	1.00			0.45			0.92	
Satd. Flow (perm)	74	4426		203	4515			842			1549	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	1315	213	18	2406	19	144	0	20	42	0	158
RTOR Reduction (vph)	0	10	0	0	0	0	0	19	0	0	19	0
Lane Group Flow (vph)	51	1518	0	18	2425	0	0	145	0	0	181	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	102.3	102.3		102.3	102.3			25.7			25.7	
Effective Green, g (s)	102.3	102.3		102.3	102.3			25.7			25.7	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.18			0.18	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	54	3234		148	3299			154			284	
v/s Ratio Prot		0.34			0.54							
v/s Ratio Perm	c0.69			0.09				c0.17			0.12	
v/c Ratio	0.94	0.47		0.12	0.73			0.94			0.64	
Uniform Delay, d1	16.4	7.7		5.6	11.0			56.4			52.8	
Progression Factor	1.34	0.54		1.69	1.22			1.00			1.00	
Incremental Delay, d2	104.5	0.5		1.2	1.1			55.4			4.7	
Delay (s)	126.4	4.7		10.6	14.5			111.8			57.5	
Level of Service	F	A		B	B			F			E	
Approach Delay (s/veh)		8.6			14.5			111.8			57.5	
Approach LOS		A			B			F			E	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	18.0	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.94				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	83.2%	ICU Level of Service		E	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1427	3309	35	0	28
Future Volume (vph)	0	1427	3309	35	0	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	5142	3579	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	5142	3579	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1427	3309	35	0	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1427	3309	35	0	28
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1427	3309	35	0	28
Future Volume (Veh/h)	0	1427	3309	35	0	28
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1427	3309	35	0	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.66				0.70	0.66
vC, conflicting volume	3344				3785	1655
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3520				3397	966
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	83
cM capacity (veh/h)	46				4	168

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	476	476	476	1655	1655	35	28
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	35	28
cSH	1700	1700	1700	1700	1700	1700	168
Volume to Capacity	0.28	0.28	0.28	0.97	0.97	0.02	0.17
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	30.6
Lane LOS							D
Approach Delay (s/veh)	0.0			0.0			30.6
Approach LOS							D

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	101.5%	ICU Level of Service		G
Analysis Period (min)	15			

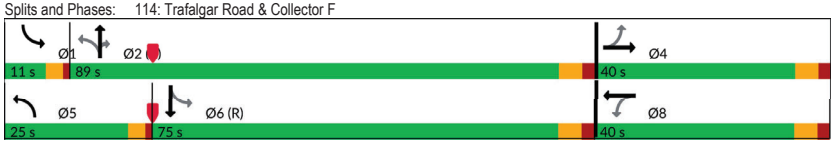
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	62	62	58	59	137	85	1626	176	166	2504	115
Future Volume (vph)	53	62	62	58	59	137	85	1626	176	166	2504	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		50.0	70.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.925			0.895				0.850		0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1666	0	1652	1612	0	1711	4421	1566	1711	4390	0
Flt Permitted	0.285			0.549			0.043			0.080		
Satd. Flow (perm)	495	1666	0	954	1612	0	77	4421	1566	144	4390	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			79				124		6	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	53	62	62	58	59	137	85	1626	176	166	2504	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	124	0	58	196	0	85	1626	176	166	2619	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0	89.0	11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%	63.6%	7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0	83.0	7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	16.5	16.5		16.5	16.5		102.6	92.1	92.1	113.5	99.1	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.73	0.66	0.66	0.81	0.71	
v/c Ratio	0.91	0.55		0.52	0.76		0.55	0.56	0.16	0.57	0.84	
Control Delay (s/veh)	157.5	50.1		72.7	52.4		30.4	26.2	8.9	32.2	12.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	157.5	50.1		72.7	52.4		30.4	26.2	8.9	32.2	12.0	
LOS	F	D		E	D		C	C	A	C	B	
Approach Delay (s/veh)		82.3			57.0			24.8			13.2	
Approach LOS		F			E			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 22.0		Intersection LOS: C	
Intersection Capacity Utilization 95.0%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	53	124	58	196	85	1626	176	166	2619
v/c Ratio	0.91	0.55	0.52	0.76	0.55	0.56	0.16	0.57	0.84
Control Delay (s/veh)	157.5	50.1	72.7	52.4	30.4	26.2	8.9	32.2	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	157.5	50.1	72.7	52.4	30.4	26.2	8.9	32.2	12.0
Queue Length 50th (m)	15.1	24.0	15.8	32.4	8.9	196.8	16.6	22.0	71.2
Queue Length 95th (m)	#35.6	42.5	m29.4	m56.8	m6.5	m175.5	m18.1	m36.7	151.3
Internal Link Dist (m)		200.2		176.3		308.8			241.5
Turn Bay Length (m)	60.0		50.0		50.0		50.0	70.0	
Base Capacity (vph)	120	430	231	451	307	2909	1072	289	3108
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.29	0.25	0.43	0.28	0.56	0.16	0.57	0.84

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	62	62	58	59	137	85	1626	176	166	2504	115
Future Volume (vph)	53	62	62	58	59	137	85	1626	176	166	2504	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.93		1.00	0.90		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1666		1652	1612		1711	4421	1566	1711	4392	
Flt Permitted	0.28	1.00		0.55	1.00		0.04	1.00	1.00	0.08	1.00	
Satd. Flow (perm)	495	1666		954	1612		78	4421	1566	145	4392	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	53	62	62	58	59	137	85	1626	176	166	2504	115
RTOR Reduction (vph)	0	30	0	0	70	0	0	0	42	0	2	0
Lane Group Flow (vph)	53	94	0	58	126	0	85	1626	134	166	2617	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	16.5	16.5		16.5	16.5		100.6	92.1	92.1	111.5	99.0	
Effective Green, g (s)	16.5	16.5		16.5	16.5		100.6	92.1	92.1	111.5	99.0	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.72	0.66	0.66	0.80	0.71	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	58	196		112	189		155	2908	1030	287	3105	
v/s Ratio Prot		0.06			0.08		0.03	0.37		c0.06	c0.60	
v/s Ratio Perm	c0.11			0.06			0.36		0.09	0.40		
v/c Ratio	0.91	0.48		0.52	0.67		0.55	0.56	0.13	0.58	0.84	
Uniform Delay, d1	61.0	57.7		58.0	59.1		25.6	13.0	9.0	18.4	14.9	
Progression Factor	1.01	1.00		1.00	0.98		1.21	1.88	2.43	1.75	0.60	
Incremental Delay, d2	86.9	1.8		4.0	8.6		0.4	0.1	0.0	1.6	1.8	
Delay (s)	148.4	59.7		62.1	66.8		31.4	24.5	21.8	33.8	10.6	
Level of Service	F	E		E	E		C	C	C	C	B	
Approach Delay (s/veh)		86.3			65.7			24.5			12.0	
Approach LOS		F			E			C			B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

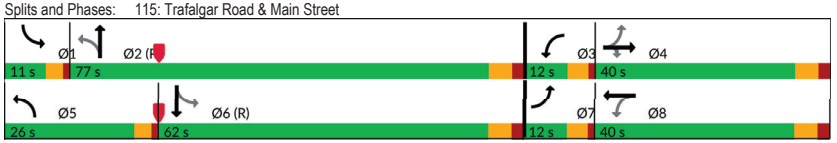
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	113	608	372	416	120	453	1761	145	94	1989	387
Future Volume (vph)	203	113	608	372	416	120	453	1761	145	94	1989	387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		50.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt			0.850		0.966			0.989			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3579	1601	1789	3457	0	1711	4372	0	1711	4315	0
Flt Permitted	0.270			0.681			0.067			0.071		
Satd. Flow (perm)	509	3579	1601	1283	3457	0	121	4372	0	128	4315	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			254		25			12			28	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	203	113	608	372	416	120	453	1761	145	94	1989	387
Shared Lane Traffic (%)												
Lane Group Flow (vph)	203	113	608	372	536	0	453	1906	0	94	2376	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0	40.0	9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	12.0	40.0	40.0	12.0	40.0		26.0	77.0		11.0	62.0	
Total Split (%)	8.6%	28.6%	28.6%	8.6%	28.6%		18.6%	55.0%		7.9%	44.3%	
Maximum Green (s)	7.5	34.0	34.0	7.5	34.0		22.0	71.0		7.0	56.0	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Don't Walk (s)		27.0	27.0		27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	43.0	34.0	34.0	43.0	34.0		84.0	71.0		65.0	56.0	
Actuated g/C Ratio	0.31	0.24	0.24	0.31	0.24		0.60	0.51		0.46	0.40	
v/c Ratio	0.91	0.13	1.05	0.88	0.62		1.41	0.86		0.68	1.36	
Control Delay (s/veh)	80.3	42.0	79.7	67.0	48.7		229.1	46.3		49.8	200.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	80.3	42.0	79.7	67.0	48.7		229.1	46.3		49.8	200.9	
LOS	F	D	E	E	D		F	D		D	F	
Approach Delay (s/veh)		75.2			56.2			81.4			195.1	
Approach LOS		E			E			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.41			
Intersection Signal Delay (s/veh): 119.3		Intersection LOS: F	
Intersection Capacity Utilization 119.1%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	203	113	608	372	536	453	1906	94	2376
v/c Ratio	0.91	0.13	1.05	0.88	0.62	1.41	0.86	0.68	1.36
Control Delay (s/veh)	80.3	42.0	79.7	67.0	48.7	229.1	46.3	49.8	200.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	80.3	42.0	79.7	67.0	48.7	229.1	46.3	49.8	200.9
Queue Length 50th (m)	42.5	13.1	~127.8	87.1	68.1	~157.3	187.7	11.5	~366.7
Queue Length 95th (m)	#86.1	21.6	#201.8	#144.4	87.6	m#220.1	m206.7	#35.3	#398.4
Internal Link Dist (m)		882.8			603.0		688.8		212.3
Turn Bay Length (m)	60.0		50.0	90.0		50.0		50.0	
Base Capacity (vph)	224	869	581	421	858	322	2223	138	1742
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.13	1.05	0.88	0.62	1.41	0.86	0.68	1.36

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	203	113	608	372	416	120	453	1761	145	94	1989	387
Future Volume (vph)	203	113	608	372	416	120	453	1761	145	94	1989	387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3579	1601	1789	3458		1711	4370		1711	4313	
Flt Permitted	0.27	1.00	1.00	0.68	1.00		0.07	1.00		0.07	1.00	
Satd. Flow (perm)	509	3579	1601	1282	3458		120	4370		129	4313	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	203	113	608	372	416	120	453	1761	145	94	1989	387
RTOR Reduction (vph)	0	0	192	0	19	0	0	6	0	0	17	0
Lane Group Flow (vph)	203	113	416	372	517	0	453	1900	0	94	2359	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	41.5	34.0	34.0	41.5	34.0		82.0	71.0		63.0	56.0	
Effective Green, g (s)	41.5	34.0	34.0	41.5	34.0		82.0	71.0		63.0	56.0	
Actuated g/C Ratio	0.30	0.24	0.24	0.30	0.24		0.59	0.51		0.45	0.40	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	219	869	388	407	839		320	2216		137	1725	
v/s Ratio Prot	c0.05	0.03		0.05	0.15		c0.22	0.43		0.03	0.55	
v/s Ratio Perm	0.22		c0.26	0.22			c0.61			0.27		
v/c Ratio	0.93	0.13	1.07	0.91	0.62		1.42	0.86		0.69	1.37	
Uniform Delay, d1	46.1	41.4	53.0	46.3	47.2		47.6	30.1		28.1	42.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.93	1.41		1.12	0.99	
Incremental Delay, d2	40.7	0.1	66.0	24.6	1.4		200.6	3.5		12.2	168.9	
Delay (s)	86.8	41.5	119.0	70.9	48.5		244.8	46.0		43.7	210.4	
Level of Service	F	D	F	E	D		F	D		D	F	
Approach Delay (s/veh)		102.4			57.7			84.2			204.0	
Approach LOS		F			E			F			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	127.5	HCM 2000 Level of Service		F	
HCM 2000 Volume to Capacity ratio	1.32				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		20.5	
Intersection Capacity Utilization	119.1%	ICU Level of Service		H	
Analysis Period (min)	15				

c Critical Lane Group

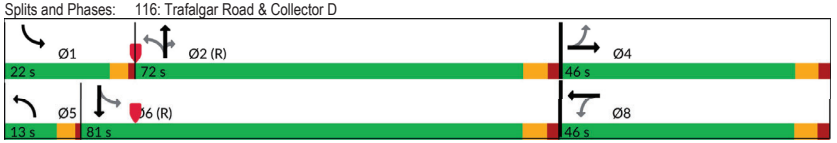
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	19	134	284	19	385	173	1575	74	173	2339	214
Future Volume (vph)	121	19	134	284	19	385	173	1575	74	173	2339	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			70.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.869			0.857				0.850		0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1565	0	1652	1543	0	1711	4421	1566	1711	4363	0
Flt Permitted	0.224			0.606			0.057			0.057		
Satd. Flow (perm)	389	1565	0	1054	1543	0	103	4421	1566	103	4363	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		125			200				86		14	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	121	19	134	284	19	385	173	1575	74	173	2339	214
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	153	0	284	404	0	173	1575	74	173	2553	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0	26.0	11.0	26.0	
Total Split (s)	46.0	46.0		46.0	46.0		13.0	72.0	72.0	22.0	81.0	
Total Split (%)	32.9%	32.9%		32.9%	32.9%		9.3%	51.4%	51.4%	15.7%	57.9%	
Maximum Green (s)	40.0	40.0		40.0	40.0		9.0	66.0	66.0	18.0	75.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	40.0	40.0		40.0	40.0		80.9	69.9	69.9	88.8	75.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.58	0.50	0.50	0.63	0.54	
v/c Ratio	1.09	0.29		0.94	0.69		1.06	0.71	0.09	0.77	1.09	
Control Delay (s/veh)	158.4	11.1		88.3	28.8		134.2	7.1	0.9	33.9	78.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	158.4	11.1		88.3	28.8		134.2	7.1	0.9	33.9	78.3	
LOS	F	B		F	C		F	A	A	C	E	
Approach Delay (s/veh)		76.2			53.4			18.9			75.5	
Approach LOS		E			D			B			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay (s/veh): 54.1		Intersection LOS: D	
Intersection Capacity Utilization 111.0%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	121	153	284	404	173	1575	74	173	2553
v/c Ratio	1.09	0.29	0.94	0.69	1.06	0.71	0.09	0.77	1.09
Control Delay (s/veh)	158.4	11.1	88.3	28.8	134.2	7.1	0.9	33.9	78.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	158.4	11.1	88.3	28.8	134.2	7.1	0.9	33.9	78.3
Queue Length 50th (m)	~38.2	5.7	78.4	52.3	~36.0	25.9	0.0	35.0	~329.5
Queue Length 95th (m)	#79.6	23.0	#135.7	91.5	#89.7	55.7	m1.1	m27.3	m182.8
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	111	536	301	583	163	2208	825	272	2343
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.29	0.94	0.69	1.06	0.71	0.09	0.64	1.09

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	121	19	134	284	19	385	173	1575	74	173	2339	214
Future Volume (vph)	121	19	134	284	19	385	173	1575	74	173	2339	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1564		1652	1543		1711	4421	1566	1711	4365	
Flt Permitted	0.22	1.00		0.61	1.00		0.06	1.00	1.00	0.06	1.00	
Satd. Flow (perm)	389	1564		1053	1543		103	4421	1566	103	4365	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	121	19	134	284	19	385	173	1575	74	173	2339	214
RTOR Reduction (vph)	0	89	0	0	143	0	0	0	37	0	7	0
Lane Group Flow (vph)	121	64	0	284	261	0	173	1575	37	173	2547	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	40.0	40.0		40.0	40.0		78.9	69.9	69.9	88.0	75.0	
Effective Green, g (s)	40.0	40.0		40.0	40.0		78.9	69.9	69.9	88.0	75.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.56	0.50	0.50	0.63	0.54	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	446		300	440		161	2207	781	226	2338	
v/s Ratio Prot		0.04			0.17		c0.07	0.36		0.08	c0.58	
v/s Ratio Perm	c0.31			0.27			0.53		0.02	0.40		
v/c Ratio	1.09	0.14		0.95	0.59		1.07	0.71	0.05	0.77	1.09	
Uniform Delay, d1	50.0	37.2		49.0	43.0		43.9	27.3	18.0	37.3	32.5	
Progression Factor	1.00	1.00		1.00	1.00		1.66	0.19	0.25	1.00	1.21	
Incremental Delay, d2	111.7	0.1		37.5	2.1		86.4	1.7	0.1	1.4	41.0	
Delay (s)	161.7	37.4		86.5	45.2		159.5	7.0	4.5	38.7	80.2	
Level of Service	F	D		F	D		F	A	A	D	F	
Approach Delay (s/veh)		92.3			62.2			21.3			77.6	
Approach LOS		F			E			C			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	57.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	111.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

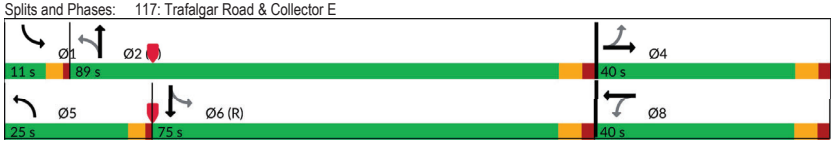
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	12	5	109	11	83	39	1730	47	78	2647	32
Future Volume (vph)	9	12	5	109	11	83	39	1730	47	78	2647	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.956			0.868			0.996			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1801	0	1789	1635	0	1711	4403	0	1711	4412	0
Flt Permitted	0.661			0.746			0.040			0.070		
Satd. Flow (perm)	1245	1801	0	1405	1635	0	72	4403	0	126	4412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			83			4			1	
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	12	5	109	11	83	39	1730	47	78	2647	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	17	0	109	94	0	39	1777	0	78	2679	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	16.3	16.3		16.3	16.3		108.1	99.5		111.9	103.2	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.77	0.71		0.80	0.74	
v/c Ratio	0.06	0.08		0.67	0.36		0.30	0.57		0.40	0.82	
Control Delay (s/veh)	52.7	40.5		78.1	17.1		28.3	2.2		14.4	9.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.2	
Total Delay (s/veh)	52.7	40.5		78.1	17.1		28.3	2.2		14.4	9.5	
LOS	D	D		E	B		C	A		B	A	
Approach Delay (s/veh)		44.7			49.8			2.8			9.6	
Approach LOS		D			D			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 8.9		Intersection LOS: A	
Intersection Capacity Utilization 83.3%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	9	17	109	94	39	1777	78	2679
v/c Ratio	0.06	0.08	0.67	0.36	0.30	0.57	0.40	0.82
Control Delay (s/veh)	52.7	40.5	78.1	17.1	28.3	2.2	14.4	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay (s/veh)	52.7	40.5	78.1	17.1	28.3	2.2	14.4	9.5
Queue Length 50th (m)	2.4	3.0	29.9	2.9	2.3	19.9	3.0	82.0
Queue Length 95th (m)	m5.2	m7.1	48.2	18.8	m9.2	23.6	m3.6	m80.8
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	302	441	341	459	304	3130	193	3251
Starvation Cap Reductn	0	0	0	0	0	0	0	119
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.04	0.32	0.20	0.13	0.57	0.40	0.86

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	12	5	109	11	83	39	1730	47	78	2647	32
Future Volume (vph)	9	12	5	109	11	83	39	1730	47	78	2647	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.96		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1800		1789	1634		1711	4403		1711	4413	
Flt Permitted	0.66	1.00		0.75	1.00		0.04	1.00		0.07	1.00	
Satd. Flow (perm)	1245	1800		1406	1634		72	4403		126	4413	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	9	12	5	109	11	83	39	1730	47	78	2647	32
RTOR Reduction (vph)	0	4	0	0	73	0	0	1	0	0	0	0
Lane Group Flow (vph)	9	13	0	109	21	0	39	1776	0	78	2679	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	16.3	16.3		16.3	16.3		104.8	99.5		110.6	102.4	
Effective Green, g (s)	16.3	16.3		16.3	16.3		104.8	99.5		110.6	102.4	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.75	0.71		0.79	0.73	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	144	209		163	190		115	3129		192	3227	
v/s Ratio Prot		0.01			0.01		0.01	0.40		c0.02	c0.61	
v/s Ratio Perm	0.01			c0.08			0.24			0.30		
v/c Ratio	0.06	0.06		0.67	0.11		0.34	0.57		0.41	0.83	
Uniform Delay, d1	55.0	55.0		59.3	55.3		17.7	9.8		7.5	12.9	
Progression Factor	1.00	0.97		1.00	0.98		2.70	0.15		3.05	0.62	
Incremental Delay, d2	0.2	0.1		9.9	0.3		1.5	0.6		0.1	0.2	
Delay (s)	55.2	53.7		69.3	54.4		49.3	2.1		23.0	8.2	
Level of Service	E	D		E	D		D	A		C	A	
Approach Delay (s/veh)		54.3			62.4			3.1			8.7	
Approach LOS		D			E			A			A	

Intersection Summary

HCM 2000 Control Delay (s/veh)	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	11	515	1094	162	409	28
Future Volume (vph)	11	515	1094	162	409	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.981		0.991	
Flt Protected		0.999			0.955	
Satd. Flow (prot)	0	3418	3356	0	1704	0
Flt Permitted		0.999			0.955	
Satd. Flow (perm)	0	3418	3356	0	1704	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	11	515	1094	162	409	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	526	1256	0	437	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.4%		ICU Level of Service C	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	515	1094	162	409	28
Future Volume (Veh/h)	11	515	1094	162	409	28
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	11	515	1094	162	409	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1256				1455	628
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1256				1455	628
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				0	93
cM capacity (veh/h)	550				118	426

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	183	343	729	527	437
Volume Left	11	0	0	0	409
Volume Right	0	0	0	162	28
cSH	550	1700	1700	1700	124
Volume to Capacity	0.02	0.20	0.43	0.31	3.52
Queue Length 95th (m)	0.5	0.0	0.0	0.0	Err
Control Delay (s/veh)	0.9	0.0	0.0	0.0	Err
Lane LOS	A				F
Approach Delay (s/veh)	0.3		0.0		Err
Approach LOS					F

Intersection Summary			
Average Delay	1969.2		
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	121	231	537	0	0	371
Future Volume (vph)	121	231	537	0	0	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.983				
Satd. Flow (prot)	0	3518	3579	0	1629	0
Flt Permitted		0.983				
Satd. Flow (perm)	0	3518	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	121	231	537	0	0	371
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	352	537	0	371	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	121	231	537	0	0	371
Future Volume (Veh/h)	121	231	537	0	0	371
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	121	231	537	0	0	371
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	537				895	269
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	537				895	269
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	88				100	49
cM capacity (veh/h)	1027				247	730

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	198	154	358	179	371
Volume Left	121	0	0	0	0
Volume Right	0	0	0	0	371
cSH	1027	1700	1700	1700	730
Volume to Capacity	0.12	0.09	0.21	0.11	0.51
Queue Length 95th (m)	3.0	0.0	0.0	0.0	22.2
Control Delay (s/veh)	5.9	0.0	0.0	0.0	14.9
Lane LOS	A				B
Approach Delay (s/veh)	3.3		0.0		14.9
Approach LOS					B

Intersection Summary				
Average Delay		5.3		
Intersection Capacity Utilization		57.7%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	231	0	0	0	0	537
Future Volume (vph)	231	0	0	0	0	537
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			52.5	161.7	
Travel Time (s)	55.9			3.9	12.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	231	0	0	0	0	537
Shared Lane Traffic (%)						
Lane Group Flow (vph)	231	0	0	0	0	537
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	231	0	0	0	0	537
Future Volume (vph)	231	0	0	0	0	537
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	231	0	0	0	0	537

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	231	0	537
Volume Left (vph)	231	0	0
Volume Right (vph)	0	0	537
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	6.2	5.7	4.1
Degree Utilization, x	0.40	0.00	0.61
Capacity (veh/h)	545	603	854
Control Delay (s/veh)	12.1	7.5	13.4
Approach Delay (s/veh)	12.1		13.4
Approach LOS	B		B

Intersection Summary			
Delay	13.0		
Level of Service	B		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	62	20	0	0	0
Future Volume (vph)	0	62	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	70	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	8.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	62	20	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	62	0	0	20	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	62	20	0	0	0
Future Volume (Veh/h)	0	62	20	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	62	20	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	40	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	40	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	960	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	62	20	0
Volume Left	0	20	0
Volume Right	62	0	0
cSH	1085	1623	1700
Volume to Capacity	0.06	0.01	0.00
Queue Length 95th (m)	1.4	0.3	0.0
Control Delay (s/veh)	8.5	7.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	7.2	0.0
Approach LOS	A		

Intersection Summary				
Average Delay	8.2			
Intersection Capacity Utilization	13.8%	ICU Level of Service	A	
Analysis Period (min)	15			

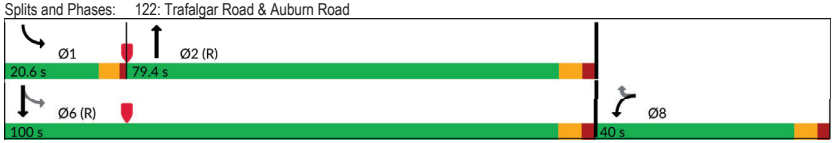
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	116	185	1932	66	86	1983
Future Volume (vph)	116	185	1932	66	86	1983
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.995			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4399	0	1711	4421
Flt Permitted	0.950				0.048	
Satd. Flow (perm)	1789	1601	4399	0	86	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		185	5			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	116	185	1932	66	86	1983
Shared Lane Traffic (%)						
Lane Group Flow (vph)	116	185	1998	0	86	1983
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		5.0	20.0
Minimum Split (s)	40.0	40.0	40.0		9.5	40.0
Total Split (s)	40.0	40.0	79.4		20.6	100.0
Total Split (%)	28.6%	28.6%	56.7%		14.7%	71.4%
Maximum Green (s)	34.0	34.0	73.4		16.1	94.0
Yellow Time (s)	4.0	4.0	4.0		3.5	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Don't Walk (s)	9.0	9.0	27.0			27.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	14.6	14.6	100.0		114.9	113.4
Actuated g/C Ratio	0.10	0.10	0.71		0.82	0.81
v/c Ratio	0.62	0.56	0.64		0.50	0.55
Control Delay (s/veh)	73.9	14.0	7.7		24.3	5.6
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	73.9	14.0	7.8		24.3	5.6
LOS	E	B	A		C	A
Approach Delay (s/veh)	37.1		7.8			6.4
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay (s/veh): 9.1		Intersection LOS: A	
Intersection Capacity Utilization 65.6%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	116	185	1998	86	1983
v/c Ratio	0.62	0.56	0.64	0.50	0.55
Control Delay (s/veh)	73.9	14.0	7.7	24.3	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	73.9	14.0	7.8	24.3	5.6
Queue Length 50th (m)	31.8	0.0	79.0	3.7	65.6
Queue Length 95th (m)	50.5	21.5	41.5	22.3	94.2
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	434	528	3144	257	3579
Starvation Cap Reductn	0	0	112	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.35	0.66	0.33	0.55

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	116	185	1932	66	86	1983
Future Volume (vph)	116	185	1932	66	86	1983
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		4.5	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4399		1711	4421
Flt Permitted	0.95	1.00	1.00		0.05	1.00
Satd. Flow (perm)	1789	1601	4399		87	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	116	185	1932	66	86	1983
RTOR Reduction (vph)	0	166	1	0	0	0
Lane Group Flow (vph)	116	19	1997	0	86	1983
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	14.6	14.6	100.1		113.4	113.4
Effective Green, g (s)	14.6	14.6	100.1		113.4	113.4
Actuated g/C Ratio	0.10	0.10	0.72		0.81	0.81
Clearance Time (s)	6.0	6.0	6.0		4.5	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	186	166	3145		172	3581
v/s Ratio Prot	c0.06		c0.45		0.03	c0.45
v/s Ratio Perm		0.01			0.37	
v/c Ratio	0.62	0.12	0.63		0.50	0.55
Uniform Delay, d1	60.1	56.9	10.4		14.6	4.6
Progression Factor	1.00	1.00	0.64		1.00	1.00
Incremental Delay, d2	6.4	0.3	0.5		2.3	0.6
Delay (s)	66.4	57.2	7.1		16.9	5.2
Level of Service	E	E	A		B	A
Approach Delay (s/veh)	60.7		7.1			5.7
Approach LOS	E		A			A

Intersection Summary				
HCM 2000 Control Delay (s/veh)	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

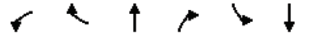
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	62	20	20	62	0
Future Volume (vph)	0	62	20	20	62	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.976		
Satd. Flow (prot)	1629	0	0	1838	1883	0
Flt Permitted				0.976		
Satd. Flow (perm)	1629	0	0	1838	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	62	20	20	62	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	62	0	0	40	62	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	62	20	20	62	0
Future Volume (Veh/h)	0	62	20	20	62	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	62	20	20	62	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	122	62	62			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	122	62	62			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	862	1003	1541			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	62	40	62
Volume Left	0	20	0
Volume Right	62	0	0
cSH	1003	1541	1700
Volume to Capacity	0.06	0.01	0.04
Queue Length 95th (m)	1.5	0.3	0.0
Control Delay (s/veh)	8.8	3.7	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.8	3.7	0.0
Approach LOS	A		

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	19.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	101	26	47	29	41
Future Volume (vph)	19	101	26	47	29	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.886		0.913			
Flt Protected	0.992					0.980
Satd. Flow (prot)	1583	0	1644	0	0	1765
Flt Permitted	0.992					0.980
Satd. Flow (perm)	1583	0	1644	0	0	1765
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	19	101	26	47	29	41
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	0	73	0	0	70
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	101	26	47	29	41
Future Volume (Veh/h)	19	101	26	47	29	41
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	19	101	26	47	29	41
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	149	50			73	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	149	50			73	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	90			98	
cM capacity (veh/h)	828	1019			1527	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	120	73	70
Volume Left	19	0	29
Volume Right	101	47	0
cSH	983	1700	1527
Volume to Capacity	0.12	0.04	0.02
Queue Length 95th (m)	3.2	0.0	0.4
Control Delay (s/veh)	9.2	0.0	3.2
Lane LOS	A		A
Approach Delay (s/veh)	9.2	0.0	3.2
Approach LOS	A		

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	24.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	97	20	120	222	5	31	35	89	56	7	0
Future Volume (vph)	0	97	20	120	222	5	31	35	89	56	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.998			0.922				
Flt Protected					0.983			0.990			0.957	
Satd. Flow (prot)	0	1840	0	0	1767	0	0	1719	0	0	1802	0
Flt Permitted					0.983			0.990			0.957	
Satd. Flow (perm)	0	1840	0	0	1767	0	0	1719	0	0	1802	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	97	20	120	222	5	31	35	89	56	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	347	0	0	155	0	0	63	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	97	20	120	222	5	31	35	89	56	7	0
Future Volume (Veh/h)	0	97	20	120	222	5	31	35	89	56	7	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	97	20	120	222	5	31	35	89	56	7	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	227			117			575	574	107	678	582	225
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	227			117			575	574	107	678	582	225
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			92	91	91	81	98	100
cM capacity (veh/h)	1341			1471			397	394	947	290	390	815

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	117	347	155	63
Volume Left	0	120	31	56
Volume Right	20	5	89	0
cSH	1341	1471	594	299
Volume to Capacity	0.00	0.08	0.26	0.21
Queue Length 95th (m)	0.0	2.0	7.9	5.9
Control Delay (s/veh)	0.0	3.1	13.2	20.2
Lane LOS		A	B	C
Approach Delay (s/veh)	0.0	3.1	13.2	20.2
Approach LOS			B	C

Intersection Summary				
Average Delay		6.5		
Intersection Capacity Utilization		43.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	136	60	41	451	85	57
Future Volume (vph)	136	60	41	451	85	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.959				0.946	
Flt Protected				0.996	0.971	
Satd. Flow (prot)	1806	0	0	1876	1730	0
Flt Permitted				0.996	0.971	
Satd. Flow (perm)	1806	0	0	1876	1730	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	136	60	41	451	85	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	196	0	0	492	142	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		97	97		97	97
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	7	66	10	5	55
Future Volume (vph)	4	7	66	10	5	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.914		0.982			
Flt Protected	0.982					0.996
Satd. Flow (prot)	1560	0	1768	0	0	1793
Flt Permitted	0.982					0.996
Satd. Flow (perm)	1560	0	1768	0	0	1793
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	7	66	10	5	55
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	0	76	0	0	60
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	7	66	10	5	55
Future Volume (Veh/h)	4	7	66	10	5	55
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	7	66	10	5	55
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	136	71			76	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	136	71			76	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	855	991			1523	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	11	76	60
Volume Left	4	0	5
Volume Right	7	10	0
cSH	937	1700	1523
Volume to Capacity	0.01	0.04	0.00*
Queue Length 95th (m)	0.3	0.0	0.1
Control Delay (s/veh)	8.9	0.0	0.6
Lane LOS	A		A
Approach Delay (s/veh)	8.9	0.0	0.6
Approach LOS	A		

Intersection Summary				
Average Delay		0.9		
Intersection Capacity Utilization		17.0%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	14	10	13	45	24	15	129	13	20	123	4
Future Volume (vph)	2	14	10	13	45	24	15	129	13	20	123	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.948			0.960			0.989			0.996	
Flt Protected		0.996			0.992			0.995			0.993	
Satd. Flow (prot)	0	1642	0	0	1656	0	0	1772	0	0	1781	0
Flt Permitted		0.996			0.992			0.995			0.993	
Satd. Flow (perm)	0	1642	0	0	1656	0	0	1772	0	0	1781	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	2	14	10	13	45	24	15	129	13	20	123	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	82	0	0	157	0	0	147	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	14	10	13	45	24	15	129	13	20	123	4
Future Volume (Veh/h)	2	14	10	13	45	24	15	129	13	20	123	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	2	14	10	13	45	24	15	129	13	20	123	4
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	377	337	125	348	333	136	127			142		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	377	337	125	348	333	136	127			142		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	98	92	97	99			99		
cM capacity (veh/h)	522	570	926	578	573	913	1459			1441		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	26	82	157	147
Volume Left	2	13	15	20
Volume Right	10	24	13	4
cSH	663	644	1459	1441
Volume to Capacity	0.04	0.13	0.01	0.01
Queue Length 95th (m)	0.9	3.3	0.2	0.3
Control Delay (s/veh)	10.6	11.4	0.8	1.1
Lane LOS	B	B	A	A
Approach Delay (s/veh)	10.6	11.4	0.8	1.1
Approach LOS	B	B		

Intersection Summary					
Average Delay		3.6			
Intersection Capacity Utilization		25.9%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	43	5	0	77	0	74	184	12	0	113	36
Future Volume (vph)	13	43	5	0	77	0	74	184	12	0	113	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989						0.994			0.967	
Flt Protected		0.989						0.986				
Satd. Flow (prot)	0	1842	0	0	1883	0	0	1765	0	0	1741	0
Flt Permitted		0.989						0.986				
Satd. Flow (perm)	0	1842	0	0	1883	0	0	1765	0	0	1741	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	43	5	0	77	0	74	184	12	0	113	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	61	0	0	77	0	0	270	0	0	149	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	97		97	24		97	97		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	43	5	0	77	0	74	184	12	0	113	36
Future Volume (Veh/h)	13	43	5	0	77	0	74	184	12	0	113	36
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	13	43	5	0	77	0	74	184	12	0	113	36
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	508	475	131	496	487	190	149			196		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	508	475	131	496	487	190	149			196		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	91	99	100	83	100	95			100		
cM capacity (veh/h)	398	463	919	430	456	852	1432			1377		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	61	77	270	149
Volume Left	13	0	74	0
Volume Right	5	0	12	36
cSH	466	456	1432	1377
Volume to Capacity	0.13	0.17	0.05	0.00
Queue Length 95th (m)	3.4	4.6	1.2	0.0
Control Delay (s/veh)	13.9	14.5	2.4	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	13.9	14.5	2.4	0.0
Approach LOS	B	B		

Intersection Summary					
Average Delay		4.7			
Intersection Capacity Utilization		42.6%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	36	2	0	43	14	5	41	13	11	30	18
Future Volume (vph)	21	36	2	0	43	14	5	41	13	11	30	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.967			0.970			0.959	
Flt Protected		0.983						0.996			0.991	
Satd. Flow (prot)	0	1700	0	0	1741	0	0	1740	0	0	1711	0
Flt Permitted		0.983						0.996			0.991	
Satd. Flow (perm)	0	1700	0	0	1741	0	0	1740	0	0	1711	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	21	36	2	0	43	14	5	41	13	11	30	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	59	0	0	57	0	0	59	0	0	59	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	36	2	0	43	14	5	41	13	11	30	18
Future Volume (Veh/h)	21	36	2	0	43	14	5	41	13	11	30	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	36	2	0	43	14	5	41	13	11	30	18
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	154	125	39	139	128	48	48			54		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	154	125	39	139	128	48	48			54		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	95	100	100	94	99	100			99		
cM capacity (veh/h)	761	758	1033	794	755	1022	1559			1551		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	59	57	59	59
Volume Left	21	0	5	11
Volume Right	2	14	13	18
cSH	766	807	1559	1551
Volume to Capacity	0.08	0.07	0.00*	0.00*
Queue Length 95th (m)	1.9	1.7	0.1	0.2
Control Delay (s/veh)	10.1	9.8	0.6	1.4
Lane LOS	B	A	A	A
Approach Delay (s/veh)	10.1	9.8	0.6	1.4
Approach LOS	B	A		

Intersection Summary					
Average Delay		5.5			
Intersection Capacity Utilization		22.3%	ICU Level of Service		A
Analysis Period (min)		15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	71	0	8	90	131	8	21	6	119	20	7
Future Volume (vph)	5	71	0	8	90	131	8	21	6	119	20	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.923			0.977			0.994	
Flt Protected		0.997			0.998			0.989			0.961	
Satd. Flow (prot)	0	1795	0	0	1659	0	0	1740	0	0	1720	0
Flt Permitted		0.997			0.998			0.989			0.961	
Satd. Flow (perm)	0	1795	0	0	1659	0	0	1740	0	0	1720	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	5	71	0	8	90	131	8	21	6	119	20	7
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	76	0	0	229	0	0	35	0	0	146	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	71	0	8	90	131	8	21	6	119	20	7
Future Volume (Veh/h)	5	71	0	8	90	131	8	21	6	119	20	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	5	71	0	8	90	131	8	21	6	119	20	7
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	221			71			270	318	71	269	253	156
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	221			71			270	318	71	269	253	156
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			99	96	99	82	97	99
cM capacity (veh/h)	1348			1529			657	593	991	657	645	890

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	76	229	35	146
Volume Left	5	8	8	119
Volume Right	0	131	6	7
cSH	1348	1529	653	663
Volume to Capacity	0.00*	0.00*	0.05	0.22
Queue Length 95th (m)	0.1	0.1	1.3	6.4
Control Delay (s/veh)	0.5	0.3	10.8	12.0
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.5	0.3	10.8	12.0
Approach LOS			B	B

Intersection Summary					
Average Delay		4.6			
Intersection Capacity Utilization		36.6%	ICU Level of Service		A
Analysis Period (min)		15			

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	198	81	96	74	76	44
Future Volume (vph)	198	81	96	74	76	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.961				0.950	
Flt Protected	0.966		0.950			
Satd. Flow (prot)	1672	0	1711	0	1711	0
Flt Permitted	0.966		0.950			
Satd. Flow (perm)	1672	0	1711	0	1711	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	198	81	96	74	76	44
Shared Lane Traffic (%)						
Lane Group Flow (vph)	279	0	96	74	120	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			3.3	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

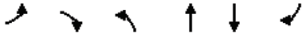
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	198	81	96	74	76	44
Future Volume (Veh/h)	198	81	96	74	76	44
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	198	81	96	74	76	44
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	364	98	120			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	364	98	120			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	67	92	93			
cM capacity (veh/h)	594	958	1468			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	279	96	120
Volume Left	198	96	0
Volume Right	81	0	44
cSH	668	1468	1700
Volume to Capacity	0.42	0.07	0.07
Queue Length 95th (m)	15.7	1.6	0.0
Control Delay (s/veh)	14.2	7.6	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	14.2	Err	0.0
Approach LOS	B		

Intersection Summary					
Average Delay		Err			
Intersection Capacity Utilization		Err%	ICU Level of Service		H
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	31	20	7	18	0
Future Volume (vph)	0	31	20	7	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.964		
Satd. Flow (prot)	1629	0	0	1816	1883	0
Flt Permitted				0.964		
Satd. Flow (perm)	1629	0	0	1816	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	364.2	
Travel Time (s)	16.7			24.3	18.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	31	20	7	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	31	0	0	27	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	31	20	7	18	0
Future Volume (Veh/h)	0	31	20	7	18	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	31	20	7	18	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	65	18	18			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	65	18	18			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	99			
cM capacity (veh/h)	929	1061	1599			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	31	27	18
Volume Left	0	20	0
Volume Right	31	0	0
cSH	1061	1599	1700
Volume to Capacity	0.03	0.01	0.01
Queue Length 95th (m)	0.7	0.3	0.0
Control Delay (s/veh)	8.5	5.4	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	5.4	0.0
Approach LOS	A		

Intersection Summary				
Average Delay	5.4			
Intersection Capacity Utilization	18.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	51	63	0	51	24	16
Future Volume (vph)	51	63	0	51	24	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.925				0.946	
Flt Protected					0.971	
Satd. Flow (prot)	1666	0	0	1801	1654	0
Flt Permitted					0.971	
Satd. Flow (perm)	1666	0	0	1801	1654	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	63	0	51	24	16
Shared Lane Traffic (%)						
Lane Group Flow (vph)	114	0	0	51	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	51	63	0	51	24	16
Future Volume (Veh/h)	51	63	0	51	24	16
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	51	63	0	51	24	16
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	64	0	145	56	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	64	0	145	56	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	94	94	100	94	99	
cM capacity (veh/h)	815	1085	731	823	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	114	51	40
Volume Left	0	0	24
Volume Right	63	0	16
cSH	945	823	1623
Volume to Capacity	0.12	0.06	0.01
Queue Length 95th (m)	3.1	1.5	0.3
Control Delay (s/veh)	9.3	9.7	4.4
Lane LOS	A	A	A
Approach Delay (s/veh)	9.3	9.7	4.4
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.5		
Intersection Capacity Utilization	16.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	34	41	86	36	4
Future Volume (vph)	4	34	41	86	36	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.879				0.986	
Flt Protected	0.995			0.984		
Satd. Flow (prot)	1521	0	0	1772	1775	0
Flt Permitted	0.995			0.984		
Satd. Flow (perm)	1521	0	0	1772	1775	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	34	41	86	36	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	0	0	127	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	34	41	86	36	4
Future Volume (Veh/h)	4	34	41	86	36	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	34	41	86	36	4
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	206	38	40			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	206	38	40			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	97	97			
cM capacity (veh/h)	762	1034	1570			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	38	127	40
Volume Left	4	41	0
Volume Right	34	0	4
cSH	997	1570	1700
Volume to Capacity	0.04	0.03	0.02
Queue Length 95th (m)	0.9	0.6	0.0
Control Delay (s/veh)	8.8	2.5	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.8	2.5	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	44	162	291	115	112	117
Future Volume (vph)	44	162	291	115	112	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.962		0.931	
Flt Protected		0.989			0.976	
Satd. Flow (prot)	0	1781	1732	0	1580	0
Flt Permitted		0.989			0.976	
Satd. Flow (perm)	0	1781	1732	0	1580	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	44	162	291	115	112	117
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	206	406	0	229	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 56.7%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	162	291	115	112	117
Future Volume (Veh/h)	44	162	291	115	112	117
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	44	162	291	115	112	117
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.95				0.95	0.95
vC, conflicting volume	406				599	349
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	348				551	288
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				75	84
cM capacity (veh/h)	1150				453	714

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	206	406	229
Volume Left	44	0	112
Volume Right	0	115	117
cSH	1150	1700	557
Volume to Capacity	0.04	0.24	0.41
Queue Length 95th (m)	0.9	0.0	15.2
Control Delay (s/veh)	2.0	0.0	15.9
Lane LOS	A		C
Approach Delay (s/veh)	2.0	0.0	15.9
Approach LOS			C

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	49	50	19	160	11	10
Future Volume (vph)	49	50	19	160	11	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.932				0.936	
Flt Protected				0.995	0.974	
Satd. Flow (prot)	1620	0	0	1730	1642	0
Flt Permitted				0.995	0.974	
Satd. Flow (perm)	1620	0	0	1730	1642	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	49	50	19	160	11	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	0	0	179	21	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	26.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	49	50	19	160	11	10
Future Volume (Veh/h)	49	50	19	160	11	10
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	49	50	19	160	11	10
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	32	0	102	27	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	32	0	102	27	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	94	95	98	81	99	
cM capacity (veh/h)	855	1085	798	860	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	99	179	21
Volume Left	0	19	11
Volume Right	50	0	10
cSH	957	853	1623
Volume to Capacity	0.10	0.21	0.00*
Queue Length 95th (m)	2.6	6.0	0.2
Control Delay (s/veh)	9.2	10.3	3.8
Lane LOS	A	B	A
Approach Delay (s/veh)	9.2	10.3	3.8
Approach LOS	A	B	

Intersection Summary			
Average Delay	9.5		
Intersection Capacity Utilization	26.1%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	83	268	39	55	5	183	11	193	3	0	16
Future Volume (vph)	53	83	268	39	55	5	183	11	193	3	0	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910			0.993			0.933			0.886	
Flt Protected		0.993			0.981			0.977			0.992	
Satd. Flow (prot)	0	1627	0	0	1754	0	0	1641	0	0	1583	0
Flt Permitted		0.993			0.981			0.977			0.992	
Satd. Flow (perm)	0	1627	0	0	1754	0	0	1641	0	0	1583	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	53	83	268	39	55	5	183	11	193	3	0	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	404	0	0	99	0	0	387	0	0	19	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.9%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	83	268	39	55	5	183	11	193	3	0	16
Future Volume (Veh/h)	53	83	268	39	55	5	183	11	193	3	0	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	53	83	268	39	55	5	183	11	193	3	0	16
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked				1.00			1.00	1.00	1.00	1.00	1.00	
vC, conflicting volume	60			351			475	461	217	657	593	58
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	60			346			470	456	211	653	588	58
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			97			61	98	77	99	100	98
cM capacity (veh/h)	1544			1208			469	466	825	271	392	1009

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	404	99	387	19
Volume Left	53	39	183	3
Volume Right	268	5	193	16
cSH	1544	1208	598	705
Volume to Capacity	0.03	0.03	0.65	0.03
Queue Length 95th (m)	0.8	0.8	35.6	0.6
Control Delay (s/veh)	1.3	3.3	21.4	10.2
Lane LOS	A	A	C	B
Approach Delay (s/veh)	1.3	3.3	21.4	10.2
Approach LOS			C	B

Intersection Summary					
Average Delay		10.3			
Intersection Capacity Utilization		60.9%	ICU Level of Service		B
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	11	59	32	0
Future Volume (vph)	0	1	11	59	32	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.992		
Satd. Flow (prot)	1504	0	0	1786	1801	0
Flt Permitted				0.992		
Satd. Flow (perm)	1504	0	0	1786	1801	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1	11	59	32	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1	0	0	70	32	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1	11	59	32	0
Future Volume (Veh/h)	0	1	11	59	32	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1	11	59	32	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	113	32	32			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	113	32	32			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	877	1042	1580			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	1	70	32
Volume Left	0	11	0
Volume Right	1	0	0
cSH	1042	1580	1700
Volume to Capacity	0.00*	0.00*	0.02
Queue Length 95th (m)	0.0	0.2	0.0
Control Delay (s/veh)	8.5	1.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	1.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	20.4%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	111	112	0	0	36	48	37	0	148	0
Future Volume (vph)	0	0	111	112	0	0	36	48	37	0	148	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.959				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	111	112	0	0	36	48	37	0	148	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	0	0	112	0	0	121	0	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	37.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	111	112	0	0	36	48	37	0	148	0
Future Volume (Veh/h)	0	0	111	112	0	0	36	48	37	0	148	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	111	112	0	0	36	48	37	0	148	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			111			354	280	56	341	335	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			111			354	280	56	341	335	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			92	92	96	100	73	100
cM capacity (veh/h)	1623			1479			448	581	1011	522	541	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	111	112	121	148
Volume Left	0	112	36	0
Volume Right	111	0	37	0
cSH	1623	1479	606	541
Volume to Capacity	0.00	0.08	0.20	0.27
Queue Length 95th (m)	0.0	1.9	5.6	8.4
Control Delay (s/veh)	0.0	7.6	12.4	14.1
Lane LOS		A	B	B
Approach Delay (s/veh)	0.0	7.6	12.4	14.1
Approach LOS			B	B

Intersection Summary				
Average Delay	9.0			
Intersection Capacity Utilization	37.4%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	34	11	27	49	0
Future Volume (vph)	0	34	11	27	49	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.850					
Flt Protected				0.986		
Satd. Flow (prot)	0	0	0	1857	1883	0
Flt Permitted				0.986		
Satd. Flow (perm)	0	0	0	1857	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			32.9	35.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	34	11	27	49	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	0	0	38	49	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	34	11	27	49	0
Future Volume (Veh/h)	0	34	11	27	49	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	34	11	27	49	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	98	49	49			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	98	49	49			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	99			
cM capacity (veh/h)	895	1020	1558			

Direction, Lane #	NB 1	SB 1
Volume Total	38	49
Volume Left	11	0
Volume Right	0	0
cSH	1558	1700
Volume to Capacity	0.00*	0.03
Queue Length 95th (m)	0.2	0.0
Control Delay (s/veh)	2.2	0.0
Lane LOS	A	
Approach Delay (s/veh)	2.2	0.0
Approach LOS		

Intersection Summary				
Average Delay		Err		
Intersection Capacity Utilization		Err%	ICU Level of Service	H
Analysis Period (min)		15		

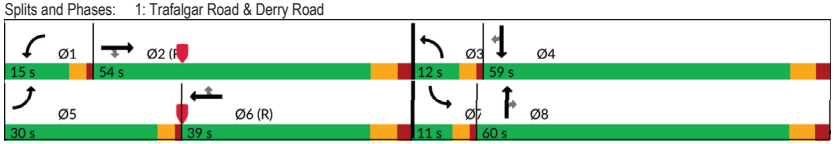
* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1039	1794	394	435	626	300	183	2258	515	151	1564	121
Future Volume (vph)	1039	1794	394	435	626	300	183	2258	515	151	1564	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			111			123			200			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Adj. Flow (vph)	1060	1831	402	444	639	306	187	2304	526	154	1596	123
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1060	1831	402	444	639	306	187	2304	526	154	1596	123
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	36.8
Total Split (s)	30.0	54.0	54.0	15.0	39.0	39.0	12.0	60.0	60.0	11.0	59.0	59.0
Total Split (%)	21.4%	38.6%	38.6%	10.7%	27.9%	27.9%	8.6%	42.9%	42.9%	7.9%	42.1%	42.1%
Maximum Green (s)	26.0	47.1	47.1	11.0	32.1	32.1	8.0	53.2	53.2	7.0	52.2	52.2
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	4.2
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	2.6
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	23.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	27.0	49.1	49.1	12.0	34.1	34.1	9.0	55.2	55.2	8.0	54.2	54.2
Actuated g/C Ratio	0.19	0.35	0.35	0.09	0.24	0.24	0.06	0.39	0.39	0.06	0.39	0.39
v/c Ratio	1.58	1.02	0.64	1.49	0.54	0.62	0.95	1.40	0.71	0.93	0.98	0.22
Control Delay (s/veh)	310.1	65.6	35.4	283.0	46.3	32.3	88.9	211.9	20.2	96.7	53.0	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	310.1	65.6	35.4	283.0	46.3	32.3	88.9	211.9	20.2	96.7	53.0	9.4
LOS	F	E	D	F	D	C	F	F	C	F	D	A
Approach Delay (s/veh)		140.6			118.9			170.9			53.7	
Approach LOS		F			F			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.58			
Intersection Signal Delay (s/veh): 130.0		Intersection LOS: F	
Intersection Capacity Utilization 111.3%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	1060	1831	402	444	639	306	187	2304	526	154	1596	123
v/c Ratio	1.58	1.02	0.64	1.49	0.54	0.62	0.95	1.40	0.71	0.93	0.98	0.22
Control Delay (s/veh)	310.1	65.6	35.4	283.0	46.3	32.3	88.9	211.9	20.2	96.7	53.0	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	310.1	65.6	35.4	283.0	46.3	32.3	88.9	211.9	20.2	96.7	53.0	9.4
Queue Length 50th (m)	~224.6	~184.6	61.1	~89.6	59.0	33.1	30.0	~374.7	51.6	22.8	192.7	15.2
Queue Length 95th (m)	m#238.3	m#212.6	m65.6	#125.3	57.5	52.4	m27.9	m#310.9	m43.0	m#44.3	#235.5	m24.7
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	669	1803	627	297	1193	490	196	1646	738	166	1631	566
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.58	1.02	0.64	1.49	0.54	0.62	0.95	1.40	0.71	0.93	0.98	0.22

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1039	1794	394	435	626	300	183	2258	515	151	1564	121
Future Volume (vph)	1039	1794	394	435	626	300	183	2258	515	151	1564	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	4.8
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3471	5142	1585	3471	4902	1633	3054	4175	1566	2918	4214	1268
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1060	1831	402	444	639	306	187	2304	526	154	1596	123
RTOR Reduction (vph)	0	0	72	0	0	93	0	0	121	0	0	75
Lane Group Flow (vph)	1060	1831	330	444	639	213	187	2304	405	154	1596	48
Heavy Vehicles (%)	2%	2%	3%	2%	7%	0%	7%	8%	2%	12%	7%	26%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	26.0	47.1	47.1	11.0	32.1	32.1	8.0	53.2	53.2	7.0	52.2	52.2
Effective Green, g (s)	27.0	49.1	49.1	12.0	34.1	34.1	9.0	55.2	55.2	8.0	54.2	54.2
Actuated g/C Ratio	0.19	0.35	0.35	0.09	0.24	0.24	0.06	0.39	0.39	0.06	0.39	0.39
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	6.8
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	669	1803	555	297	1193	397	196	1646	617	166	1631	490
v/s Ratio Prot	c0.31	c0.36		0.13	0.13		c0.06	c0.55		0.05	0.38	
v/s Ratio Perm			0.21			0.13			0.26			0.04
v/c Ratio	1.58	1.02	0.59	1.49	0.54	0.54	0.95	1.40	0.66	0.93	0.98	0.10
Uniform Delay, d1	56.5	45.4	37.3	64.0	46.1	46.1	65.3	42.4	34.6	65.7	42.3	27.3
Progression Factor	1.36	1.11	1.23	1.09	0.97	0.96	1.23	0.90	0.90	0.80	0.90	1.95
Incremental Delay, d2	265.4	16.4	1.6	238.6	1.6	4.8	10.7	180.2	0.3	41.1	14.3	0.1
Delay (s)	342.4	66.7	47.5	308.1	46.1	48.8	91.1	218.4	31.7	93.8	52.6	53.5
Level of Service	F	E	D	F	D	D	F	F	C	F	D	D
Approach Delay (s/veh)		153.1			130.5			178.0			56.0	
Approach LOS		F			F			F			E	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	138.7	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.33			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7	
Intersection Capacity Utilization	111.3%	ICU Level of Service	H	
Analysis Period (min)	15			

c Critical Lane Group

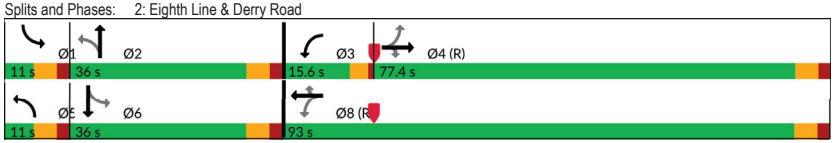
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	1861	137	94	1141	28	168	45	80	11	15	13
Future Volume (vph)	46	1861	137	94	1141	28	168	45	80	11	15	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.904			0.930	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1671	0	1217	1653	0
Flt Permitted	0.190			0.044			0.437			0.674		
Satd. Flow (perm)	257	4520	1601	85	4391	1633	840	1671	0	863	1653	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			101			70		58			14	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Adj. Flow (vph)	48	1939	143	98	1189	29	175	47	83	11	16	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	1939	143	98	1189	29	175	130	0	11	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	5	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.5	36.0	36.0	11.0	36.0		11.0	36.0	
Total Split (s)	77.4	77.4	77.4	15.6	93.0	93.0	11.0	36.0		11.0	36.0	
Total Split (%)	55.3%	55.3%	55.3%	11.1%	66.4%	66.4%	7.9%	25.7%		7.9%	25.7%	
Maximum Green (s)	71.4	71.4	71.4	11.6	87.0	87.0	5.0	30.0		5.0	30.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0		7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0		23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0		0			0	
Act Effct Green (s)	89.9	89.9	89.9	105.0	103.0	103.0	23.8	20.1		13.6	11.6	
Actuated g/C Ratio	0.64	0.64	0.64	0.75	0.74	0.74	0.17	0.14		0.10	0.08	
v/c Ratio	0.29	0.67	0.13	0.55	0.37	0.02	0.73	0.45		0.11	0.20	
Control Delay (s/veh)	19.1	18.2	5.9	32.4	7.9	0.0	57.6	26.6		46.7	40.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	19.1	18.2	5.9	32.4	7.9	0.0	57.6	26.6		46.7	40.1	
LOS	B	B	A	C	A	A	E	C		D	D	
Approach Delay (s/veh)		17.4			9.5			44.4			41.9	
Approach LOS		B			A			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay (s/veh): 17.1		Intersection LOS: B	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	48	1939	143	98	1189	29	175	130	11	30
v/c Ratio	0.29	0.67	0.13	0.55	0.37	0.02	0.73	0.45	0.11	0.20
Control Delay (s/veh)	19.1	18.2	5.9	32.4	7.9	0.0	57.6	26.6	46.7	40.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.1	18.2	5.9	32.4	7.9	0.0	57.6	26.6	46.7	40.1
Queue Length 50th (m)	8.5	196.0	11.1	11.1	61.2	0.0	47.5	21.1	3.3	4.3
Queue Length 95th (m)	m18.6	257.6	m19.2	28.5	61.0	0.0	#100.4	44.2	11.2	13.9
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	164	2901	1063	210	3231	1220	239	415	98	365
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.67	0.13	0.47	0.37	0.02	0.73	0.31	0.11	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	1861	137	94	1141	28	168	45	80	11	15	13
Future Volume (vph)	46	1861	137	94	1141	28	168	45	80	11	15	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.90		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1285	4520	1601	1825	4391	1633	1825	1672		1217	1653	
Flt Permitted	0.19	1.00	1.00	0.04	1.00	1.00	0.44	1.00		0.67	1.00	
Satd. Flow (perm)	256	4520	1601	85	4391	1633	839	1672		863	1653	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	48	1939	143	98	1189	29	175	47	83	11	16	14
RTOR Reduction (vph)	0	0	39	0	0	8	0	50	0	0	13	0
Lane Group Flow (vph)	48	1939	104	98	1189	21	175	80	0	11	17	0
Heavy Vehicles (%)	42%	2%	2%	0%	5%	0%	0%	2%	5%	50%	2%	15%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	86.3	86.3	86.3	99.5	99.5	99.5	28.5	20.1		11.1	8.7	
Effective Green, g (s)	86.3	86.3	86.3	99.5	99.5	99.5	28.5	20.1		11.1	8.7	
Actuated g/C Ratio	0.62	0.62	0.62	0.71	0.71	0.71	0.20	0.14		0.08	0.06	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	157	2786	986	174	3120	1160	267	240		74	102	
v/s Ratio Prot		c0.43		c0.04	0.27		c0.06	0.05		0.00	0.01	
v/s Ratio Perm	0.19		0.07	0.36		0.01	c0.07			0.01		
v/c Ratio	0.31	0.70	0.11	0.56	0.38	0.02	0.66	0.33		0.15	0.17	
Uniform Delay, d1	12.7	18.0	11.0	25.4	8.0	5.9	49.3	53.9		59.9	62.2	
Progression Factor	1.03	0.99	1.31	1.00	1.00	1.00	0.73	0.73		1.00	1.00	
Incremental Delay, d2	3.1	0.9	0.1	4.1	0.4	0.0	5.5	0.8		0.9	0.8	
Delay (s)	16.2	18.7	14.6	29.5	8.4	6.0	41.7	40.0		60.8	63.0	
Level of Service	B	B	B	C	A	A	D	D		E	E	
Approach Delay (s/veh)		18.4			9.9			40.9			62.4	
Approach LOS		B			A			D			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	17.7	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.70				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0		
Intersection Capacity Utilization	70.5%	ICU Level of Service	C		
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	605	987	504	230	410	142	238	2086	293	116	2363	377
Future Volume (vph)	605	987	504	230	410	142	238	2086	293	116	2363	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			103			125			159			339
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Adj. Flow (vph)	611	997	509	232	414	143	240	2107	296	117	2387	381
Shared Lane Traffic (%)												
Lane Group Flow (vph)	611	997	509	232	414	143	240	2107	296	117	2387	381
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	22.0	48.0	48.0	14.0	40.0	40.0	12.0	67.0	67.0	11.0	66.0	66.0
Total Split (%)	15.7%	34.3%	34.3%	10.0%	28.6%	28.6%	8.6%	47.9%	47.9%	7.9%	47.1%	47.1%
Maximum Green (s)	18.0	42.0	42.0	10.0	34.0	34.0	8.0	60.0	60.0	7.0	59.0	59.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	19.0	42.7	42.7	11.0	34.7	34.7	10.3	63.2	63.2	8.2	61.0	61.0
Actuated g/C Ratio	0.14	0.31	0.31	0.08	0.25	0.25	0.07	0.45	0.45	0.06	0.44	0.44
v/c Ratio	1.34	0.73	0.93	0.84	0.38	0.29	1.14	1.10	0.37	0.69	1.28	0.48
Control Delay (s/veh)	211.0	47.0	62.8	94.9	31.4	8.6	118.9	94.0	27.1	82.5	154.0	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	211.0	47.0	62.8	94.9	31.4	8.6	118.9	94.0	27.1	82.5	154.0	4.5
LOS	F	D	E	F	C	A	F	F	C	F	F	A
Approach Delay (s/veh)		98.2			45.9			88.8			131.4	
Approach LOS		F			D			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay (s/veh): 101.7		Intersection LOS: F	
Intersection Capacity Utilization 96.4%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	611	997	509	232	414	143	240	2107	296	117	2387	381
v/c Ratio	1.34	0.73	0.93	0.84	0.38	0.29	1.14	1.10	0.37	0.69	1.28	0.48
Control Delay (s/veh)	211.0	47.0	62.8	94.9	31.4	8.6	118.9	94.0	27.1	82.5	154.0	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	211.0	47.0	62.8	94.9	31.4	8.6	118.9	94.0	27.1	82.5	154.0	4.5
Queue Length 50th (m)	~117.7	104.0	117.3	19.5	41.7	17.9	~49.5	~286.5	42.5	17.6	~366.2	19.9
Queue Length 95th (m)	#155.9	123.1	#186.4	#52.8	54.3	29.8	m#40.9	m183.3	m34.5	m20.1	m#353.3	m21.1
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	457	1406	559	275	1139	512	211	1918	794	169	1871	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.34	0.71	0.91	0.84	0.36	0.28	1.14	1.10	0.37	0.69	1.28	0.48

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	605	987	504	230	410	142	238	2086	293	116	2363	377
Future Volume (vph)	605	987	504	230	410	142	238	2086	293	116	2363	377
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	4476	1555	3506	4433	1633	2867	4254	1566	2892	4295	1365
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	611	997	509	232	414	143	240	2107	296	117	2387	381
RTOR Reduction (vph)	0	0	72	0	0	94	0	0	87	0	0	191
Lane Group Flow (vph)	611	997	437	232	414	49	240	2107	209	117	2387	190
Heavy Vehicles (%)	5%	3%	5%	1%	4%	0%	14%	6%	2%	13%	5%	17%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	18.0	40.7	40.7	10.0	32.7	32.7	9.3	61.1	61.1	7.2	59.0	59.0
Effective Green, g (s)	19.0	42.7	42.7	11.0	34.7	34.7	10.3	63.1	63.1	8.2	61.0	61.0
Actuated g/C Ratio	0.14	0.31	0.31	0.08	0.25	0.25	0.07	0.45	0.45	0.06	0.44	0.44
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	457	1365	474	275	1098	404	210	1917	705	169	1871	594
v/s Ratio Prot	c0.18	0.22		0.07	0.09		c0.08	0.50		0.04	c0.56	
v/s Ratio Perm			c0.28			0.03			0.13			0.14
v/c Ratio	1.34	0.73	0.92	0.84	0.38	0.12	1.14	1.10	0.30	0.69	1.28	0.32
Uniform Delay, d1	60.5	43.5	47.1	63.7	43.7	40.8	64.9	38.4	24.4	64.7	39.5	25.9
Progression Factor	1.00	1.00	1.00	1.10	0.70	0.77	0.92	1.40	2.34	1.11	0.73	0.86
Incremental Delay, d2	165.9	2.0	23.6	20.0	0.2	0.1	70.0	45.5	0.1	5.8	126.2	0.7
Delay (s)	226.4	45.5	70.6	90.1	30.7	31.6	129.5	99.4	57.2	77.5	154.9	23.0
Level of Service	F	D	E	F	C	C	F	F	E	E	F	C
Approach Delay (s/veh)		103.8			48.3			97.4			134.4	
Approach LOS		F			D			F			F	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	107.0	HCM 2000 Level of Service	F		
HCM 2000 Volume to Capacity ratio	1.18				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0		
Intersection Capacity Utilization	96.4%	ICU Level of Service	F		
Analysis Period (min)	15				

c Critical Lane Group

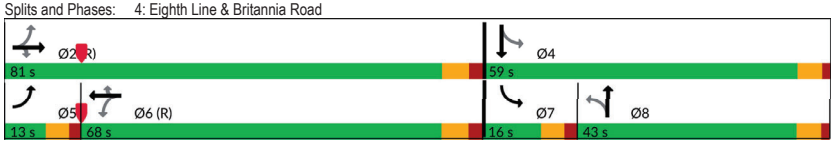
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1238	15	27	735	96	26	174	38	75	173	31
Future Volume (vph)	31	1238	15	27	735	96	26	174	38	75	173	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.973			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1782	0	1825	1875	0
Flt Permitted	0.276			0.166			0.626			0.256		
Satd. Flow (perm)	530	4476	1306	319	4476	1633	1103	1782	0	492	1875	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			68			115		8			8	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Adj. Flow (vph)	32	1263	15	28	750	98	27	178	39	77	177	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	1263	15	28	750	98	27	217	0	77	210	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	13.0	81.0	81.0	68.0	68.0	68.0	43.0	43.0		16.0	59.0	
Total Split (%)	9.3%	57.9%	57.9%	48.6%	48.6%	48.6%	30.7%	30.7%		11.4%	42.1%	
Maximum Green (s)	7.0	74.2	74.2	61.2	61.2	61.2	37.3	37.3		10.0	53.3	
Yellow Time (s)	4.0	4.6	4.6	4.6	4.6	4.6	4.2	4.2		4.0	4.2	
All-Red Time (s)	2.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		2.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	91.1	90.3	90.3	82.5	82.5	82.5	22.0	22.0		36.9	37.2	
Actuated g/C Ratio	0.65	0.65	0.65	0.59	0.59	0.59	0.16	0.16		0.26	0.27	
v/c Ratio	0.08	0.44	0.02	0.15	0.28	0.10	0.16	0.76		0.35	0.42	
Control Delay (s/veh)	8.4	8.7	0.0	20.3	16.2	2.3	36.4	55.5		28.7	29.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	8.4	8.7	0.0	20.3	16.2	2.3	36.4	55.5		28.7	29.3	
LOS	A	A	A	C	B	A	D	E		C	C	
Approach Delay (s/veh)		8.6			14.8			53.4			29.1	
Approach LOS		A			B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay (s/veh): 16.8		Intersection LOS: B	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	32	1263	15	28	750	98	27	217	77	210
v/c Ratio	0.08	0.44	0.02	0.15	0.28	0.10	0.16	0.76	0.35	0.42
Control Delay (s/veh)	8.4	8.7	0.0	20.3	16.2	2.3	36.4	55.5	28.7	29.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.4	8.7	0.0	20.3	16.2	2.3	36.4	55.5	28.7	29.3
Queue Length 50th (m)	2.1	35.1	0.0	3.7	46.0	0.0	6.1	54.2	15.6	42.4
Queue Length 95th (m)	m3.5	41.7	m0.0	11.3	64.7	6.9	13.4	81.2	18.0	43.1
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	410	2886	866	188	2638	1009	293	480	224	718
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.44	0.02	0.15	0.28	0.10	0.09	0.45	0.34	0.29

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	1238	15	27	735	96	26	174	38	75	173	31
Future Volume (vph)	31	1238	15	27	735	96	26	174	38	75	173	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1306	1825	4476	1633	1674	1782		1825	1876	
Flt Permitted	0.28	1.00	1.00	0.17	1.00	1.00	0.63	1.00		0.26	1.00	
Satd. Flow (perm)	530	4476	1306	318	4476	1633	1104	1782		492	1876	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.94
Adj. Flow (vph)	32	1263	15	28	750	98	27	178	39	77	177	33
RTOR Reduction (vph)	0	0	5	0	0	42	0	7	0	0	6	0
Lane Group Flow (vph)	32	1263	10	28	750	56	27	210	0	77	204	0
Heavy Vehicles (%)	0%	3%	25%	0%	3%	0%	9%	6%	0%	0%	0%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	90.3	90.3	90.3	80.1	80.1	80.1	22.0	22.0		37.2	37.2	
Effective Green, g (s)	90.3	90.3	90.3	80.1	80.1	80.1	22.0	22.0		37.2	37.2	
Actuated g/C Ratio	0.65	0.65	0.65	0.57	0.57	0.57	0.16	0.16		0.27	0.27	
Clearance Time (s)	6.0	6.8	6.8	6.8	6.8	6.8	5.7	5.7		6.0	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	380	2887	842	181	2560	934	173	280		218	498	
v/s Ratio Prot	0.00	c0.28			0.17			c0.12		0.02	c0.11	
v/s Ratio Perm	0.05		0.01	0.09		0.03	0.02			0.07		
v/c Ratio	0.08	0.44	0.01	0.15	0.29	0.06	0.16	0.75		0.35	0.41	
Uniform Delay, d1	9.5	12.3	8.9	14.1	15.4	13.3	51.0	56.4		40.4	42.4	
Progression Factor	0.77	0.64	1.00	1.00	1.00	1.00	0.71	0.72		0.64	0.67	
Incremental Delay, d2	0.1	0.4	0.0	1.8	0.3	0.1	0.4	10.7		1.0	0.5	
Delay (s)	7.4	8.2	8.9	15.9	15.7	13.4	36.6	51.5		27.0	29.1	
Level of Service	A	A	A	B	B	B	D	D		C	C	
Approach Delay (s/veh)		8.2			15.4			49.8			28.5	
Approach LOS		A			B			D			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	16.4	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.5	
Intersection Capacity Utilization	65.9%	ICU Level of Service	C	
Analysis Period (min)	15			

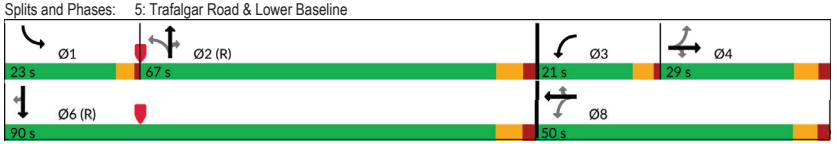
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	553	113	353	212	235	57	2226	260	571	2547	104
Future Volume (vph)	223	553	113	353	212	235	57	2226	260	571	2547	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1738	3614	1601	1789	3579	1541	1631	4214	1551	3319	4295	1521
Flt Permitted	0.614			0.147			0.065			0.950		
Satd. Flow (perm)	1123	3614	1601	277	3579	1541	112	4214	1551	3319	4295	1521
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			245			133			66
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Adj. Flow (vph)	232	576	118	368	221	245	57	2226	260	595	2653	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	576	118	368	221	245	57	2226	260	595	2653	108
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	4	4	4	3	8	8	2	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	7.0	10.0	10.0	25.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	24.2	24.2	24.2	11.5	24.2	24.2	31.6	31.6	31.6	11.0	31.6	31.6
Total Split (s)	29.0	29.0	29.0	21.0	50.0	50.0	67.0	67.0	67.0	23.0	90.0	90.0
Total Split (%)	20.7%	20.7%	20.7%	15.0%	35.7%	35.7%	47.9%	47.9%	47.9%	16.4%	64.3%	64.3%
Maximum Green (s)	22.8	22.8	22.8	16.5	43.8	43.8	60.4	60.4	60.4	19.0	83.4	83.4
Yellow Time (s)	4.2	4.2	4.2	3.5	4.2	4.2	4.6	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	5.2	4.2	4.2	3.5	4.2	4.2	5.6	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)					7.0	7.0						
Flash Don't Walk (s)					11.0	11.0						
Pedestrian Calls (#/hr)					0	0						
Act Effct Green (s)	23.8	24.8	24.8	46.5	45.8	45.8	61.4	62.4	62.4	20.0	85.4	85.4
Actuated g/C Ratio	0.17	0.18	0.18	0.33	0.33	0.33	0.44	0.45	0.45	0.14	0.61	0.61
v/c Ratio	1.22	0.90	0.33	1.31	0.19	0.37	1.16	1.19	0.34	1.26	1.01	0.11
Control Delay (s/veh)	184.9	74.5	16.9	205.7	46.2	17.3	218.7	124.6	13.1	159.6	49.0	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	184.9	74.5	16.9	205.7	46.2	17.3	218.7	124.6	13.1	159.6	49.0	12.5
LOS	F	E	B	F	D	B	F	F	B	F	D	B
Approach Delay (s/veh)		94.8			108.1			115.3			67.4	
Approach LOS		F			F			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.31			
Intersection Signal Delay (s/veh): 91.1		Intersection LOS: F	
Intersection Capacity Utilization 120.2%		ICU Level of Service H	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	232	576	118	368	221	245	57	2226	260	595	2653	108
v/c Ratio	1.22	0.90	0.33	1.31	0.19	0.37	1.16	1.19	0.34	1.26	1.01	0.11
Control Delay (s/veh)	184.9	74.5	16.9	205.7	46.2	17.3	218.7	124.6	13.1	159.6	49.0	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	184.9	74.5	16.9	205.7	46.2	17.3	218.7	124.6	13.1	159.6	49.0	12.5
Queue Length 50th (m)	~81.6	83.8	5.7	~117.5	28.4	9.2	~19.7	~325.3	21.6	~109.3	~270.7	10.8
Queue Length 95th (m)	#136.0	#115.1	23.6	#181.1	42.4	43.6	#50.6	#358.7	42.5	m#89.4	m226.4	m9.5
Internal Link Dist (m)		1293.1			1410.4			889.5			3062.5	
Turn Bay Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Base Capacity (vph)	190	640	360	281	1170	668	49	1878	765	474	2619	953
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.90	0.33	1.31	0.19	0.37	1.16	1.19	0.34	1.26	1.01	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	553	113	353	212	235	57	2226	260	571	2547	104
Future Volume (vph)	223	553	113	353	212	235	57	2226	260	571	2547	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	5.2	4.2	4.2	3.5	4.2	4.2	5.6	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1738	3614	1601	1789	3579	1541	1631	4214	1551	3319	4295	1521
Flt Permitted	0.61	1.00	1.00	0.15	1.00	1.00	0.07	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1123	3614	1601	276	3579	1541	112	4214	1551	3319	4295	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	1.00	1.00	1.00	0.96	0.96	0.96
Adj. Flow (vph)	232	576	118	368	221	245	57	2226	260	595	2653	108
RTOR Reduction (vph)	0	0	77	0	0	165	0	0	74	0	0	26
Lane Group Flow (vph)	232	576	41	368	221	80	57	2226	186	595	2653	82
Heavy Vehicles (%)	5%	1%	2%	2%	2%	6%	7%	7%	3%	2%	5%	5%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	Prot	NA	Perm
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Actuated Green, G (s)	22.8	22.8	22.8	43.8	43.8	43.8	60.4	60.4	60.4	19.0	83.4	83.4
Effective Green, g (s)	23.8	24.8	24.8	44.8	45.8	45.8	61.4	62.4	62.4	20.0	85.4	85.4
Actuated g/C Ratio	0.17	0.18	0.18	0.32	0.33	0.33	0.44	0.45	0.45	0.14	0.61	0.61
Clearance Time (s)	6.2	6.2	6.2	4.5	6.2	6.2	6.6	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	5.0	5.0	5.0	3.0	5.0	5.0	5.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	190	640	283	277	1170	504	49	1878	691	474	2619	927
v/s Ratio Prot		0.16		c0.17	0.06			c0.53		c0.18	0.62	
v/s Ratio Perm	0.21		0.03	c0.26		0.05	0.51		0.12			0.05
v/c Ratio	1.22	0.90	0.14	1.33	0.19	0.16	1.16	1.19	0.27	1.26	1.01	0.09
Uniform Delay, d1	58.1	56.4	48.6	40.6	33.8	33.4	39.3	38.8	24.4	60.0	27.3	11.3
Progression Factor	1.00	1.00	1.00	1.51	1.35	3.95	1.00	1.00	1.00	0.88	1.51	2.53
Incremental Delay, d2	137.4	16.6	0.5	170.3	0.2	0.3	180.2	89.1	1.0	116.5	9.0	0.0
Delay (s)	195.5	73.0	49.1	231.4	45.8	132.4	219.5	127.9	25.4	169.1	50.3	28.5
Level of Service	F	E	D	F	D	F	F	F	C	F	D	C
Approach Delay (s/veh)		100.7			153.1			119.5			70.6	
Approach LOS		F			F			F			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	99.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3
Intersection Capacity Utilization	120.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

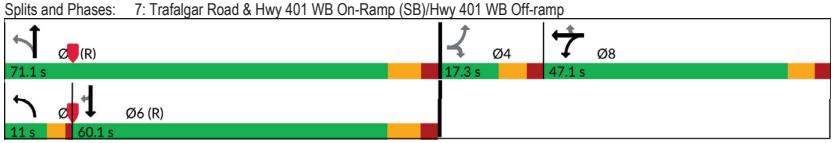
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	7	457	6	280	13	808	0	0	1521	117
Future Volume (vph)	0	0	7	457	6	280	13	808	0	0	1521	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	1883	0	1633	2879	1921	2456	1825	3941	0	0	4309	1276
Flt Permitted				0.950			0.085					
Satd. Flow (perm)	1883	0	1633	2879	1921	2456	163	3941	0	0	4309	1276
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			137			280						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Adj. Flow (vph)	0	0	7	457	6	280	13	808	0	0	1521	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	7	457	6	280	13	808	0	0	1521	117
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.1			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.5%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	63.0			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)			10.0	26.3	26.3	26.3	94.7	90.6			86.2	86.2
Actuated g/C Ratio			0.07	0.19	0.19	0.19	0.70	0.67			0.64	0.64
v/c Ratio			0.03	0.82	0.02	0.40	0.07	0.31			0.56	0.14
Control Delay (s/veh)			0.1	64.4	40.8	6.3	10.5	11.2			17.9	3.3
Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)			0.1	64.4	40.8	6.3	10.5	11.2			17.9	3.3
LOS			A	E	D	A	B	B			B	A
Approach Delay (s/veh)		0.1			42.3			11.2			16.8	
Approach LOS		A			D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay (s/veh): 21.3		Intersection LOS: C	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	7	457	6	280	13	808	1521	117
v/c Ratio	0.03	0.82	0.02	0.40	0.07	0.31	0.56	0.14
Control Delay (s/veh)	0.1	64.4	40.8	6.3	10.5	11.2	17.9	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	0.1	64.4	40.8	6.3	10.5	11.2	17.9	3.3
Queue Length 50th (m)	0.0	72.3	1.3	0.0	0.9	36.0	77.3	0.0
Queue Length 95th (m)	0.0	88.7	4.9	13.6	4.8	74.4	179.2	12.4
Internal Link Dist (m)			384.0			211.1	230.2	
Turn Bay Length (m)	10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	247	849	567	922	199	2633	2739	856
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.54	0.01	0.30	0.07	0.31	0.56	0.14

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	7	457	6	280	13	808	0	0	1521	117
Future Volume (vph)	0	0	7	457	6	280	13	808	0	0	1521	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor			1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt			0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected			1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			1633	2879	1921	2456	1825	3941			4309	1276
Flt Permitted			1.00	0.95	1.00	1.00	0.08	1.00			1.00	1.00
Satd. Flow (perm)			1633	2879	1921	2456	163	3941			4309	1276
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	7	457	6	280	13	808	0	0	1521	117
RTOR Reduction (vph)	0	0	7	0	0	226	0	0	0	0	0	50
Lane Group Flow (vph)	0	0	0	457	6	54	13	808	0	0	1521	67
Heavy Vehicles (%)	2%	2%	0%	23%	0%	17%	0%	17%	2%	2%	7%	28%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)			2.0	26.3	26.3	26.3	84.7	84.7			77.9	77.9
Effective Green, g (s)			2.0	26.3	26.3	26.3	84.7	84.7			77.9	77.9
Actuated g/C Ratio			0.01	0.19	0.19	0.19	0.63	0.63			0.57	0.57
Clearance Time (s)			7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)			3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)			24	558	372	476	136	2463			2477	733
v/s Ratio Prot				c0.16	0.00		0.00	c0.21			c0.35	
v/s Ratio Perm			c0.00			0.02	0.06					0.05
v/c Ratio			0.00	0.82	0.02	0.11	0.10	0.33			0.61	0.09
Uniform Delay, d1			65.8	52.3	44.1	45.0	12.5	12.0			18.9	12.9
Progression Factor			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.1	8.7	0.0	0.0	0.1	0.4			1.1	0.2
Delay (s)			65.8	61.0	44.1	45.0	12.6	12.3			20.1	13.2
Level of Service			E	E	D	D	B	B			C	B
Approach Delay (s/veh)		65.8			54.8			12.3			19.6	
Approach LOS		E			D			B			B	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	26.0	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	0.65				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)		26.5	
Intersection Capacity Utilization	69.5%	ICU Level of Service		C	
Analysis Period (min)	15				
c Critical Lane Group					

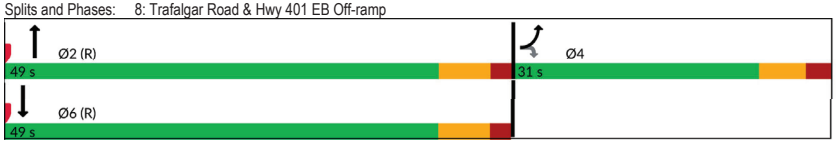
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	966	0	1414	1198	0
Future Volume (vph)	114	966	0	1414	1198	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.879	0.850				
Flt Protected	0.991					
Satd. Flow (prot)	2832	1339	0	4154	4117	0
Flt Permitted	0.991					
Satd. Flow (perm)	2832	1339	0	4154	4117	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	51	51				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Adj. Flow (vph)	114	966	0	1414	1198	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	597	483	0	1414	1198	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	30.2	30.2		35.8	35.8	
Actuated g/C Ratio	0.38	0.38		0.45	0.45	
v/c Ratio	0.54	0.90		0.76	0.65	
Control Delay (s/veh)	21.1	46.2		21.1	18.6	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	21.1	46.2		21.1	18.6	
LOS	C	D		C	B	
Approach Delay (s/veh)	32.3			21.1	18.6	
Approach LOS	C			C	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay (s/veh): 23.6		Intersection LOS: C	
Intersection Capacity Utilization 74.7%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	597	483	1414	1198
v/c Ratio	0.54	0.90	0.76	0.65
Control Delay (s/veh)	21.1	46.2	21.1	18.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	46.2	21.1	18.6
Queue Length 50th (m)	40.8	74.2	77.3	61.5
Queue Length 95th (m)	66.8	#160.4	84.7	67.7
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	1099	536	2180	2161
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.54	0.90	0.65	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	114	966	0	1414	1198	0
Future Volume (vph)	114	966	0	1414	1198	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.88	0.85		1.00	1.00	
Flt Protected	0.99	1.00		1.00	1.00	
Satd. Flow (prot)	2830	1339		4154	4117	
Flt Permitted	0.99	1.00		1.00	1.00	
Satd. Flow (perm)	2830	1339		4154	4117	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	114	966	0	1414	1198	0
RTOR Reduction (vph)	32	32	0	0	0	0
Lane Group Flow (vph)	565	451	0	1414	1198	0
Heavy Vehicles (%)	30%	11%	2%	11%	12%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	30.2	30.2		35.8	35.8	
Effective Green, g (s)	30.2	30.2		35.8	35.8	
Actuated g/C Ratio	0.38	0.38		0.45	0.45	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	1068	505		1858	1842	
v/s Ratio Prot	0.20			c0.34	0.29	
v/s Ratio Perm		c0.34				
v/c Ratio	0.53	0.89		0.76	0.65	
Uniform Delay, d1	19.4	23.4		18.5	17.2	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	17.9		3.0	1.8	
Delay (s)	19.8	41.3		21.5	19.0	
Level of Service	B	D		C	B	
Approach Delay (s/veh)	29.5			21.5	19.0	
Approach LOS	C			C	B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	74.7%	ICU Level of Service	D
Analysis Period (min)	15		

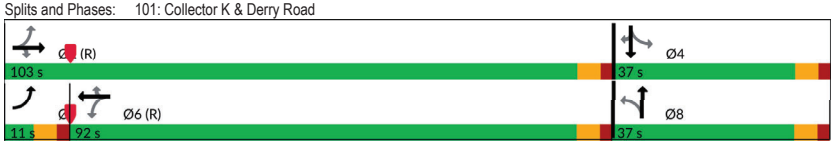
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	3154	65	6	984	12	283	0	11	72	0	21
Future Volume (vph)	35	3154	65	6	984	12	283	0	11	72	0	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.215			0.046			0.757			0.750		
Satd. Flow (perm)	405	5142	1601	87	5142	1601	1426	1601	0	1413	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			36			70		70				163
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	3428	71	7	1070	13	308	0	12	78	0	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	38	3428	71	7	1070	13	308	12	0	78	0	23
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	103.0	103.0	92.0	92.0	92.0	37.0	37.0		37.0	37.0	37.0
Total Split (%)	7.9%	73.6%	73.6%	65.7%	65.7%	65.7%	26.4%	26.4%		26.4%	26.4%	26.4%
Maximum Green (s)	5.0	97.0	97.0	86.0	86.0	86.0	31.0	31.0		31.0	31.0	31.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		Max	Max	Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	97.0	97.0	97.0	88.2	88.2	88.2	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.63	0.63	0.63	0.22	0.22		0.22		0.22
v/c Ratio	0.12	0.96	0.06	0.13	0.33	0.01	0.98	0.03		0.25		0.05
Control Delay (s/veh)	7.5	28.8	3.9	8.5	3.6	0.0	99.2	0.1		47.5		0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	7.5	28.8	3.9	8.5	3.6	0.0	99.2	0.1		47.5		0.2
LOS	A	C	A	A	A	A	F	A		D		A
Approach Delay (s/veh)		28.0			3.6			95.5			36.7	
Approach LOS		C			A			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay (s/veh): 27.2		Intersection LOS: C	
Intersection Capacity Utilization 93.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	38	3428	71	7	1070	13	308	12	78	23
v/c Ratio	0.12	0.96	0.06	0.13	0.33	0.01	0.98	0.03	0.25	0.05
Control Delay (s/veh)	7.5	28.8	3.9	8.5	3.6	0.0	99.2	0.1	47.5	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.5	28.8	3.9	8.5	3.6	0.0	99.2	0.1	47.5	0.2
Queue Length 50th (m)	3.1	299.3	2.8	0.2	11.3	0.0	86.9	0.0	18.3	0.0
Queue Length 95th (m)	6.6	326.0	7.7	m0.5	m15.7	m0.0	#146.6	0.0	33.6	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	330	3562	1120	54	3239	1034	315	409	312	481
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.96	0.06	0.13	0.33	0.01	0.98	0.03	0.25	0.05

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	3154	65	6	984	12	283	0	11	72	0	21
Future Volume (vph)	35	3154	65	6	984	12	283	0	11	72	0	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601		1789		1601
Flt Permitted	0.21	1.00	1.00	0.05	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	404	5142	1601	87	5142	1601	1426	1601		1412		1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	3428	71	7	1070	13	308	0	12	78	0	23
RTOR Reduction (vph)	0	0	11	0	0	5	0	9	0	0	0	18
Lane Group Flow (vph)	38	3428	60	7	1070	8	308	3	0	78	0	5
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	97.0	97.0	97.0	87.0	87.0	87.0	31.0	31.0		31.0		31.0
Effective Green, g (s)	97.0	97.0	97.0	87.0	87.0	87.0	31.0	31.0		31.0		31.0
Actuated g/C Ratio	0.69	0.69	0.69	0.62	0.62	0.62	0.22	0.22		0.22		0.22
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	319	3562	1109	54	3195	994	315	354		312		354
v/s Ratio Prot	0.00	c0.67			0.21			0.00				
v/s Ratio Perm	0.08		0.04	0.08		0.01	c0.22			0.06		0.00
v/c Ratio	0.12	0.96	0.05	0.13	0.33	0.01	0.98	0.01		0.25		0.01
Uniform Delay, d1	7.6	19.8	6.9	10.9	12.7	10.1	54.2	42.5		44.9		42.6
Progression Factor	1.00	1.00	1.00	0.32	0.27	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	0.2	8.6	0.1	4.3	0.3	0.0	44.2	0.0		1.9		0.1
Delay (s)	7.8	28.4	7.0	7.8	3.7	10.1	98.3	42.5		46.8		42.6
Level of Service	A	C	A	A	A	B	F	D		D		D
Approach Delay (s/veh)		27.7			3.8			96.2			45.9	
Approach LOS		C			A			F			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	27.3	HCM 2000 Level of Service		C	
HCM 2000 Volume to Capacity ratio	1.01				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	93.3%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2314	44	0	1265	11	0	0	21	0	0	93
Future Volume (vph)	0	2314	44	0	1265	11	0	0	21	0	0	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2515	48	0	1375	12	0	0	23	0	0	101
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2515	48	0	1387	0	0	0	23	0	0	101
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	54.7%	ICU Level of Service A	
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2314	44	0	1265	11	0	0	21	0	0	93
Future Volume (Veh/h)	0	2314	44	0	1265	11	0	0	21	0	0	93
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	2515	48	0	1375	12	0	0	23	0	0	101
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.91			0.66			0.70	0.70	0.66	0.70	0.70	0.91
vC, conflicting volume	1387			2563			3074	3902	838	2242	3944	464
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1085			1550			1613	2794	0	426	2854	72
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	97	100	100	89
cM capacity (veh/h)	582			278			43	13	712	348	12	889

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	838	838	838	48	550	550	287	23	101
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	48	0	0	12	23	101
cSH	1700	1700	1700	1700	1700	1700	1700	712	889
Volume to Capacity	0.49	0.49	0.49	0.03	0.32	0.32	0.17	0.03	0.11
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.9
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.2	9.6
Lane LOS								B	A
Approach Delay (s/veh)	0.0				0.0			10.2	9.6
Approach LOS								B	A

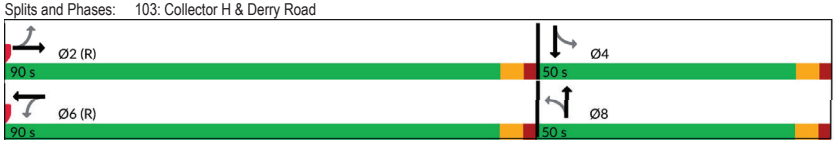
Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	54.7%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	2152	51	14	1240	23	207	0	18	26	6	30
Future Volume (vph)	162	2152	51	14	1240	23	207	0	18	26	6	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.997			0.989			0.934	
Flt Protected	0.950			0.950				0.956			0.980	
Satd. Flow (prot)	1789	4507	0	1789	4507	0	0	1781	0	0	1724	0
Flt Permitted	0.132			0.040				0.714			0.875	
Satd. Flow (perm)	249	4507	0	75	4507	0	0	1330	0	0	1539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			3			23			33	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	176	2339	55	15	1348	25	225	0	20	28	7	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	176	2394	0	15	1373	0	0	245	0	0	68	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	90.0	90.0		90.0	90.0		50.0	50.0		50.0	50.0	
Total Split (%)	64.3%	64.3%		64.3%	64.3%		35.7%	35.7%		35.7%	35.7%	
Maximum Green (s)	84.0	84.0		84.0	84.0		44.0	44.0		44.0	44.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	98.9	98.9		98.9	98.9			29.1			29.1	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
v/c Ratio	1.01	0.75		0.29	0.43			0.83			0.20	
Control Delay (s/veh)	68.5	8.7		26.4	8.1			70.1			23.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	68.5	8.7		26.4	8.1			70.1			23.3	
LOS	E	A		C	A			E			C	
Approach Delay (s/veh)		12.7			8.3			70.1			23.3	
Approach LOS		B			A			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 14.8		Intersection LOS: B	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	176	2394	15	1373	245	68
v/c Ratio	1.01	0.75	0.29	0.43	0.83	0.20
Control Delay (s/veh)	68.5	8.7	26.4	8.1	70.1	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	68.5	8.7	26.4	8.1	70.1	23.3
Queue Length 50th (m)	20.2	42.1	0.8	36.8	60.7	8.0
Queue Length 95th (m)	m#66.9	m55.2	m3.8	77.1	85.0	m18.1
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	175	3183	52	3183	433	506
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.75	0.29	0.43	0.57	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	2152	51	14	1240	23	207	0	18	26	6	30
Future Volume (vph)	162	2152	51	14	1240	23	207	0	18	26	6	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.99			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1789	4505		1789	4508			1781			1725	
Flt Permitted	0.13	1.00		0.04	1.00			0.71			0.87	
Satd. Flow (perm)	248	4505		76	4508			1330			1540	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	176	2339	55	15	1348	25	225	0	20	28	7	33
RTOR Reduction (vph)	0	1	0	0	1	0	0	18	0	0	26	0
Lane Group Flow (vph)	176	2393	0	15	1372	0	0	227	0	0	42	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	98.9	98.9		98.9	98.9			29.1			29.1	
Effective Green, g (s)	98.9	98.9		98.9	98.9			29.1			29.1	
Actuated g/C Ratio	0.71	0.71		0.71	0.71			0.21			0.21	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	175	3182		53	3184			276			320	
v/s Ratio Prot		0.53			0.30							
v/s Ratio Perm	c0.71			0.20				c0.17			0.03	
v/c Ratio	1.01	0.75		0.28	0.43			0.82			0.13	
Uniform Delay, d1	20.5	12.9		7.5	8.7			53.0			45.2	
Progression Factor	0.93	0.55		1.00	0.81			1.00			0.94	
Incremental Delay, d2	44.6	0.7		11.4	0.4			17.6			0.2	
Delay (s)	63.6	7.8		18.9	7.4			70.5			42.5	
Level of Service	E	A		B	A			E			D	
Approach Delay (s/veh)		11.6			7.5			70.5			42.5	
Approach LOS		B			A			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	14.2	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.96				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	93.6%	ICU Level of Service		F	
Analysis Period (min)	15				

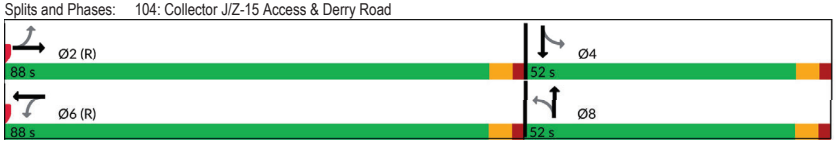
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	2019	67	8	1221	61	271	0	24	14	0	42
Future Volume (vph)	159	2019	67	8	1221	61	271	0	24	14	0	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.993			0.989			0.898	
Flt Protected	0.950			0.950				0.956			0.988	
Satd. Flow (prot)	1789	4498	0	1789	4489	0	0	1781	0	0	1671	0
Flt Permitted	0.121			0.044				0.729			0.906	
Satd. Flow (perm)	228	4498	0	83	4489	0	0	1358	0	0	1532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			8			23			46	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	2195	73	9	1327	66	295	0	26	15	0	46
Shared Lane Traffic (%)												
Lane Group Flow (vph)	173	2268	0	9	1393	0	0	321	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	88.0	88.0		88.0	88.0		52.0	52.0		52.0	52.0	
Total Split (%)	62.9%	62.9%		62.9%	62.9%		37.1%	37.1%		37.1%	37.1%	
Maximum Green (s)	82.0	82.0		82.0	82.0		46.0	46.0		46.0	46.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	91.5	91.5		91.5	91.5			36.5			36.5	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
v/c Ratio	1.16	0.77		0.17	0.47			0.87			0.14	
Control Delay (s/veh)	137.9	14.7		19.1	11.1			67.9			13.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	137.9	14.7		19.1	11.1			67.9			13.8	
LOS	F	B		B	B			E			B	
Approach Delay (s/veh)		23.4			11.2			67.9			13.8	
Approach LOS		C			B			E			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay (s/veh): 22.6		Intersection LOS: C	
Intersection Capacity Utilization 95.3%		ICU Level of Service F	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	173	2268	9	1393	321	61
v/c Ratio	1.16	0.77	0.17	0.47	0.87	0.14
Control Delay (s/veh)	137.9	14.7	19.1	11.1	67.9	13.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	137.9	14.7	19.1	11.1	67.9	13.8
Queue Length 50th (m)	~56.6	78.8	0.8	60.7	80.7	3.2
Queue Length 95th (m)	m#95.6	82.5	m3.1	88.6	109.3	13.2
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	149	2942	54	2937	461	534
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.77	0.17	0.47	0.70	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

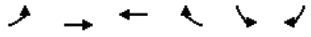
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	159	2019	67	8	1221	61	271	0	24	14	0	42
Future Volume (vph)	159	2019	67	8	1221	61	271	0	24	14	0	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.99			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4498		1789	4488			1781			1671	
Flt Permitted	0.12	1.00		0.04	1.00			0.73			0.91	
Satd. Flow (perm)	227	4498		82	4488			1357			1533	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	2195	73	9	1327	66	295	0	26	15	0	46
RTOR Reduction (vph)	0	2	0	0	3	0	0	17	0	0	34	0
Lane Group Flow (vph)	173	2266	0	9	1390	0	0	304	0	0	27	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	91.5	91.5		91.5	91.5			36.5			36.5	
Effective Green, g (s)	91.5	91.5		91.5	91.5			36.5			36.5	
Actuated g/C Ratio	0.65	0.65		0.65	0.65			0.26			0.26	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	148	2939		53	2933			353			399	
v/s Ratio Prot		0.50			0.31							
v/s Ratio Perm	c0.76			0.11				c0.22			0.02	
v/c Ratio	1.17	0.77		0.17	0.47			0.86			0.07	
Uniform Delay, d1	24.3	16.9		9.4	12.2			49.3			38.9	
Progression Factor	0.89	0.72		0.84	0.81			1.00			1.00	
Incremental Delay, d2	113.9	1.4		6.4	0.5			18.9			0.1	
Delay (s)	135.6	13.6		14.3	10.4			68.2			39.0	
Level of Service	F	B		B	B			E			D	
Approach Delay (s/veh)		22.2			10.4			68.2			39.0	
Approach LOS		C			B			E			D	

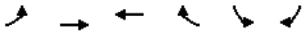
Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	3226	948	23	0	48
Future Volume (vph)	0	3226	948	23	0	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	5142	3579	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	5142	3579	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	3507	1030	25	0	52
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	3507	1030	25	0	52
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	3226	948	23	0	48
Future Volume (Veh/h)	0	3226	948	23	0	48
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	3507	1030	25	0	52
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.88				0.39	0.88
vC, conflicting volume	1055				2199	515
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	778				0	161
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	93
cM capacity (veh/h)	730				397	749

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	1169	1169	1169	515	515	25	52
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	25	52
cSH	1700	1700	1700	1700	1700	1700	749
Volume to Capacity	0.69	0.69	0.69	0.30	0.30	0.01	0.07
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	1.7
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	10.2
Lane LOS							B
Approach Delay (s/veh)	0.0			0.0			10.2
Approach LOS							B

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	65.7%	ICU Level of Service		C
Analysis Period (min)	15			

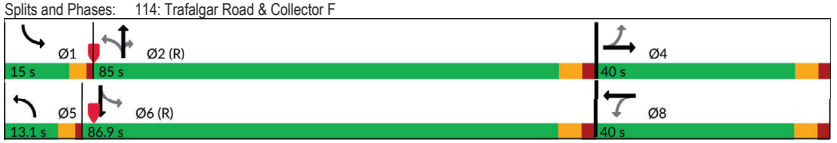
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	62	123	120	77	196	77	2629	170	195	1590	66
Future Volume (vph)	125	62	123	120	77	196	77	2629	170	195	1590	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		50.0	70.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.900			0.892				0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1621	0	1652	1606	0	1711	4421	1566	1711	4394	0
Flt Permitted	0.324			0.496			0.053			0.049		
Satd. Flow (perm)	563	1621	0	862	1606	0	95	4421	1566	88	4394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		68			86				69		6	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	67	134	130	84	213	84	2858	185	212	1728	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	201	0	130	297	0	84	2858	185	212	1800	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		13.1	85.0	85.0	15.0	86.9	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		9.4%	60.7%	60.7%	10.7%	62.1%	
Maximum Green (s)	34.0	34.0		34.0	34.0		9.1	79.0	79.0	11.0	80.9	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	34.0	34.0		34.0	34.0		89.0	79.0	79.0	95.0	82.0	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.64	0.56	0.56	0.68	0.59	
v/c Ratio	1.00	0.45		0.62	0.65		0.55	1.15	0.20	1.13	0.70	
Control Delay (s/veh)	130.1	32.9		62.0	40.9		19.0	113.0	18.4	143.3	17.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.1	0.0	0.0	0.0	
Total Delay (s/veh)	130.1	32.9		62.0	41.0		19.0	113.1	18.4	143.3	17.4	
LOS	F	C		E	D		B	F	B	F	B	
Approach Delay (s/veh)		72.2			47.4			105.0			30.6	
Approach LOS		E			D			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay (s/veh): 73.6		Intersection LOS: E	
Intersection Capacity Utilization 104.4%		ICU Level of Service G	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	136	201	130	297	84	2858	185	212	1800
v/c Ratio	1.00	0.45	0.62	0.65	0.55	1.15	0.20	1.13	0.70
Control Delay (s/veh)	130.1	32.9	62.0	40.9	19.0	113.0	18.4	143.3	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Total Delay (s/veh)	130.1	32.9	62.0	41.0	19.0	113.1	18.4	143.3	17.4
Queue Length 50th (m)	~38.8	31.6	32.8	54.1	12.2	~403.2	27.5	~55.1	99.8
Queue Length 95th (m)	#83.2	56.0	m56.8	m86.2	m9.0	m254.6	m18.1	#103.9	126.5
Internal Link Dist (m)		200.2		176.3		308.8			241.5
Turn Bay Length (m)	60.0		50.0		50.0		50.0	70.0	
Base Capacity (vph)	136	445	209	455	166	2494	913	187	2576
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	2	0	146	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.45	0.62	0.66	0.51	1.22	0.20	1.13	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	62	123	120	77	196	77	2629	170	195	1590	66
Future Volume (vph)	125	62	123	120	77	196	77	2629	170	195	1590	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.90		1.00	0.89		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1621		1652	1607		1711	4421	1566	1711	4394	
Flt Permitted	0.32	1.00		0.50	1.00		0.05	1.00	1.00	0.05	1.00	
Satd. Flow (perm)	564	1621		862	1607		96	4421	1566	88	4394	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	67	134	130	84	213	84	2858	185	212	1728	72
RTOR Reduction (vph)	0	51	0	0	65	0	0	0	30	0	2	0
Lane Group Flow (vph)	136	150	0	130	232	0	84	2858	155	212	1798	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0		87.0	79.0	79.0	93.0	82.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0		87.0	79.0	79.0	93.0	82.0	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.62	0.56	0.56	0.66	0.59	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	136	393		209	390		151	2494	883	185	2573	
v/s Ratio Prot		0.09			0.14		0.03	0.65		c0.09	0.41	
v/s Ratio Perm	c0.24			0.15			0.31		0.10	c0.67		
v/c Ratio	1.00	0.38		0.62	0.59		0.56	1.15	0.18	1.15	0.70	
Uniform Delay, d1	53.0	44.2		47.3	46.9		18.3	30.5	14.7	49.3	20.3	
Progression Factor	1.01	1.00		1.00	1.00		0.94	1.73	1.99	1.20	0.78	
Incremental Delay, d2	77.2	0.6		5.7	2.4		0.4	66.2	0.0	106.2	1.4	
Delay (s)	130.4	44.8		53.0	49.2		17.7	118.9	29.4	165.5	17.1	
Level of Service	F	D		D	D		B	F	C	F	B	
Approach Delay (s/veh)		79.3			50.3			110.9			32.8	
Approach LOS		E			D			F			C	

Intersection Summary

HCM 2000 Control Delay (s/veh)	78.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	104.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

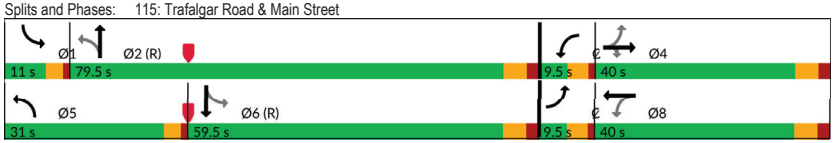
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	89	422	102	120	63	476	2309	306	153	1677	245
Future Volume (vph)	122	89	422	102	120	63	476	2309	306	153	1677	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		50.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt			0.850		0.948			0.982			0.981	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3579	1601	1789	3392	0	1711	4341	0	1711	4337	0
Flt Permitted	0.596			0.696			0.070			0.075		
Satd. Flow (perm)	1123	3579	1601	1311	3392	0	126	4341	0	135	4337	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			346		64			21			18	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	123	90	426	103	121	64	481	2332	309	155	1694	247
Shared Lane Traffic (%)												
Lane Group Flow (vph)	123	90	426	103	185	0	481	2641	0	155	1941	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0	40.0	9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	9.5	40.0	40.0	9.5	40.0		31.0	79.5		11.0	59.5	
Total Split (%)	6.8%	28.6%	28.6%	6.8%	28.6%		22.1%	56.8%		7.9%	42.5%	
Maximum Green (s)	5.0	34.0	34.0	5.0	34.0		27.0	73.5		7.0	53.5	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Don't Walk (s)		27.0	27.0		27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	23.4	16.9	16.9	23.4	16.9		103.6	81.0		72.1	53.5	
Actuated g/C Ratio	0.17	0.12	0.12	0.17	0.12		0.74	0.58		0.52	0.38	
v/c Ratio	0.58	0.21	0.86	0.44	0.40		0.81	1.05		0.61	1.16	
Control Delay (s/veh)	60.1	54.1	29.0	53.1	37.6		30.0	69.9		54.2	117.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	60.1	54.1	29.0	53.1	37.6		30.0	69.9		54.2	117.4	
LOS	E	D	C	D	D		C	E		D	F	
Approach Delay (s/veh)		38.5			43.1			63.8			112.8	
Approach LOS		D			D			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay (s/veh): 76.9		Intersection LOS: E	
Intersection Capacity Utilization 96.4%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	123	90	426	103	185	481	2641	155	1941
v/c Ratio	0.58	0.21	0.86	0.44	0.40	0.81	1.05	0.61	1.16
Control Delay (s/veh)	60.1	54.1	29.0	53.1	37.6	30.0	69.9	54.2	117.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	60.1	54.1	29.0	53.1	37.6	30.0	69.9	54.2	117.4
Queue Length 50th (m)	30.8	12.4	22.0	25.5	16.9	124.5	~292.7	29.5	~268.9
Queue Length 95th (m)	43.5	18.6	58.0	37.3	25.5	m103.0	m225.5	#63.1	#303.0
Internal Link Dist (m)		882.8			603.0		688.8		212.3
Turn Bay Length (m)	60.0		50.0	90.0		50.0		50.0	
Base Capacity (vph)	211	869	650	235	872	592	2519	256	1668
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.10	0.66	0.44	0.21	0.81	1.05	0.61	1.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	89	422	102	120	63	476	2309	306	153	1677	245
Future Volume (vph)	122	89	422	102	120	63	476	2309	306	153	1677	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3579	1601	1789	3393		1711	4343		1711	4337	
Flt Permitted	0.60	1.00	1.00	0.70	1.00		0.07	1.00		0.07	1.00	
Satd. Flow (perm)	1123	3579	1601	1310	3393		125	4343		135	4337	
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	123	90	426	103	121	64	481	2332	309	155	1694	247
RTOR Reduction (vph)	0	0	304	0	56	0	0	9	0	0	11	0
Lane Group Flow (vph)	123	90	122	103	129	0	481	2632	0	155	1930	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	21.9	16.9	16.9	21.9	16.9		101.6	81.0		70.1	53.5	
Effective Green, g (s)	21.9	16.9	16.9	21.9	16.9		101.6	81.0		70.1	53.5	
Actuated g/C Ratio	0.16	0.12	0.12	0.16	0.12		0.73	0.58		0.50	0.38	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	199	432	193	222	409		590	2512		254	1657	
v/s Ratio Prot	c0.02	0.03		0.02	0.04		c0.26	c0.61		0.07	c0.45	
v/s Ratio Perm	0.07		c0.08	0.06			0.33			0.23		
v/c Ratio	0.62	0.21	0.63	0.46	0.31		0.82	1.05		0.61	1.16	
Uniform Delay, d1	54.3	55.5	58.6	53.0	56.3		37.7	29.5		32.6	43.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.77	1.74		1.30	0.95	
Incremental Delay, d2	5.6	0.2	6.6	1.5	0.4		0.8	22.9		3.9	80.5	
Delay (s)	59.9	55.8	65.1	54.5	56.7		30.0	74.1		46.3	121.8	
Level of Service	E	E	E	D	E		C	E		D	F	
Approach Delay (s/veh)		62.8			55.9			67.3			116.2	
Approach LOS		E			E			E			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	83.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	20.5
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

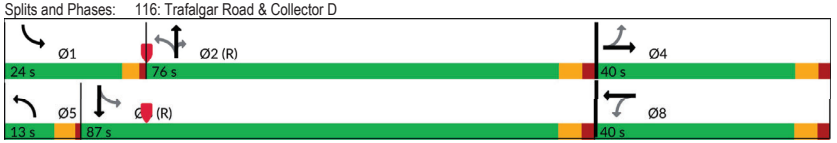
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	279	13	279	85	9	134	139	2609	230	365	1498	133
Future Volume (vph)	279	13	279	85	9	134	139	2609	230	365	1498	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			70.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.857			0.860				0.850		0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1543	0	1652	1549	0	1711	4421	1566	1711	4368	0
Flt Permitted	0.579			0.290			0.061			0.054		
Satd. Flow (perm)	1007	1543	0	504	1549	0	110	4421	1566	97	4368	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		130			146				90		15	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	14	303	92	10	146	151	2836	250	397	1628	145
Shared Lane Traffic (%)												
Lane Group Flow (vph)	303	317	0	92	156	0	151	2836	250	397	1773	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		9.5	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		13.0	76.0	76.0	24.0	87.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		9.3%	54.3%	54.3%	17.1%	62.1%	
Maximum Green (s)	34.0	34.0		34.0	34.0		8.5	70.0	70.0	20.0	81.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.5	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	34.0	34.0		34.0	34.0		80.0	70.0	70.0	96.0	81.0	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.57	0.50	0.50	0.69	0.58	
v/c Ratio	1.24	0.67		0.75	0.32		0.94	1.28	0.30	1.34	0.70	
Control Delay (s/veh)	182.1	35.5		85.4	9.5		72.5	152.3	5.3	190.0	28.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	182.1	35.5		85.4	9.5		72.5	152.3	5.3	190.0	28.6	
LOS	F	D		F	A		E	F	A	F	C	
Approach Delay (s/veh)		107.2			37.7			137.2			58.1	
Approach LOS		F			D			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay (s/veh): 103.0		Intersection LOS: F	
Intersection Capacity Utilization 115.2%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	303	317	92	156	151	2836	250	397	1773
v/c Ratio	1.24	0.67	0.75	0.32	0.94	1.28	0.30	1.34	0.70
Control Delay (s/veh)	182.1	35.5	85.4	9.5	72.5	152.3	5.3	190.0	28.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	182.1	35.5	85.4	9.5	72.5	152.3	5.3	190.0	28.6
Queue Length 50th (m)	~105.5	48.4	24.2	2.2	27.0	~419.9	8.9	~133.0	121.6
Queue Length 95th (m)	#163.9	82.8	#54.7	20.0	m29.0	m#412.7	m4.9	m#121.9	m113.2
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	244	473	122	486	160	2210	828	297	2533
Starvation Cap Reductn	0	0	0	0	0	29	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.67	0.75	0.32	0.94	1.30	0.30	1.34	0.70

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	279	13	279	85	9	134	139	2609	230	365	1498	133
Future Volume (vph)	279	13	279	85	9	134	139	2609	230	365	1498	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.86		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1542		1652	1548		1711	4421	1566	1711	4367	
Flt Permitted	0.58	1.00		0.29	1.00		0.06	1.00	1.00	0.05	1.00	
Satd. Flow (perm)	1007	1542		504	1548		110	4421	1566	97	4367	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	14	303	92	10	146	151	2836	250	397	1628	145
RTOR Reduction (vph)	0	98	0	0	111	0	0	0	45	0	6	0
Lane Group Flow (vph)	303	219	0	92	45	0	151	2836	205	397	1767	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	34.0	34.0		34.0	34.0		78.5	70.0	70.0	94.0	81.0	
Effective Green, g (s)	34.0	34.0		34.0	34.0		78.5	70.0	70.0	94.0	81.0	
Actuated g/C Ratio	0.24	0.24		0.24	0.24		0.56	0.50	0.50	0.67	0.58	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.5	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	244	374		122	375		158	2210	783	295	2526	
v/s Ratio Prot		0.14			0.03		0.06	0.64		c0.19	0.40	
v/s Ratio Perm	c0.30			0.18			0.48		0.13	c0.71		
v/c Ratio	1.24	0.58		0.75	0.12		0.96	1.28	0.26	1.35	0.70	
Uniform Delay, d1	53.0	46.8		49.1	41.3		33.3	35.0	20.1	49.9	20.9	
Progression Factor	1.00	1.00		1.00	1.00		1.47	0.64	0.39	1.03	1.36	
Incremental Delay, d2	138.6	2.3		22.9	0.1		26.2	128.4	0.2	157.7	0.1	
Delay (s)	191.6	49.1		72.0	41.5		75.2	150.7	8.1	209.0	28.5	
Level of Service	F	D		E	D		E	F	A	F	C	
Approach Delay (s/veh)		118.7			52.8			136.2			61.5	
Approach LOS		F			D			F			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	105.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	115.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

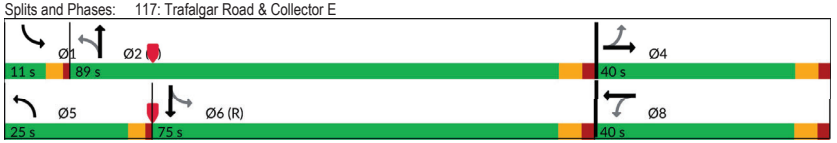
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	6	26	65	6	65	16	2864	70	97	1760	5
Future Volume (vph)	49	6	26	65	6	65	16	2864	70	97	1760	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.880			0.863			0.996				
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1657	0	1789	1625	0	1711	4403	0	1711	4421	0
Flt Permitted	0.706			0.734			0.069			0.038		
Satd. Flow (perm)	1330	1657	0	1382	1625	0	124	4403	0	68	4421	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		28			71			4				
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	7	28	71	7	71	17	3113	76	105	1913	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	53	35	0	71	78	0	17	3189	0	105	1918	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	13.2	13.2		13.2	13.2		108.8	100.3		116.8	110.6	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.78	0.72		0.83	0.79	
v/c Ratio	0.43	0.19		0.55	0.36		0.10	1.01		0.58	0.55	
Control Delay (s/veh)	69.5	25.3		74.0	17.6		4.3	29.9		39.7	7.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	35.9		0.0	0.0	
Total Delay (s/veh)	69.5	25.3		74.0	17.6		4.3	65.8		39.7	7.9	
LOS	E	C		E	B		A	E		D	A	
Approach Delay (s/veh)		51.9			44.5			65.5			9.6	
Approach LOS		D			D			E			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay (s/veh): 44.0		Intersection LOS: D	
Intersection Capacity Utilization 86.3%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	53	35	71	78	17	3189	105	1918
v/c Ratio	0.43	0.19	0.55	0.36	0.10	1.01	0.58	0.55
Control Delay (s/veh)	69.5	25.3	74.0	17.6	4.3	29.9	39.7	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	35.9	0.0	0.0
Total Delay (s/veh)	69.5	25.3	74.0	17.6	4.3	65.8	39.7	7.9
Queue Length 50th (m)	14.4	1.7	19.6	1.8	1.0	~191.2	17.0	72.6
Queue Length 95th (m)	m27.5	m12.3	m34.1	m16.2	m1.2	m145.8	m30.2	89.1
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	323	423	335	448	341	3156	180	3493
Starvation Cap Reductn	0	0	0	0	0	0	0	170
Spillback Cap Reductn	0	0	0	12	0	794	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.08	0.21	0.18	0.05	1.35	0.58	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	6	26	65	6	65	16	2864	70	97	1760	5
Future Volume (vph)	49	6	26	65	6	65	16	2864	70	97	1760	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.88		1.00	0.86		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1657		1789	1626		1711	4405		1711	4419	
Flt Permitted	0.71	1.00		0.73	1.00		0.07	1.00		0.04	1.00	
Satd. Flow (perm)	1330	1657		1383	1626		124	4405		69	4419	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	7	28	71	7	71	17	3113	76	105	1913	5
RTOR Reduction (vph)	0	25	0	0	64	0	0	1	0	0	0	0
Lane Group Flow (vph)	53	10	0	71	14	0	17	3188	0	105	1918	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.2	13.2		13.2	13.2		102.9	100.3		114.8	108.2	
Effective Green, g (s)	13.2	13.2		13.2	13.2		102.9	100.3		114.8	108.2	
Actuated g/C Ratio	0.09	0.09		0.09	0.09		0.74	0.72		0.82	0.77	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	125	156		130	153		120	3155		179	3415	
v/s Ratio Prot		0.01			0.01		0.00	c0.72		c0.04	0.43	
v/s Ratio Perm	0.04			c0.05			0.10			0.43		
v/c Ratio	0.42	0.06		0.55	0.09		0.14	1.01		0.59	0.56	
Uniform Delay, d1	59.8	57.8		60.5	57.9		5.5	19.9		47.4	6.4	
Progression Factor	1.00	0.98		0.97	0.88		1.39	1.10		1.15	1.16	
Incremental Delay, d2	2.3	0.2		4.6	0.3		0.0	7.7		3.4	0.5	
Delay (s)	62.2	56.6		63.4	51.5		7.7	29.6		57.9	7.9	
Level of Service	E	E		E	D		A	C		E	A	
Approach Delay (s/veh)		60.0			57.2			29.5			10.5	
Approach LOS		E			E			C			B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	35	503	362	479	130	9
Future Volume (vph)	35	503	362	479	130	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.914		0.991	
Flt Protected		0.997			0.955	
Satd. Flow (prot)	0	3411	3127	0	1704	0
Flt Permitted		0.997			0.955	
Satd. Flow (perm)	0	3411	3127	0	1704	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	547	393	521	141	10
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	585	914	0	151	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	503	362	479	130	9
Future Volume (Veh/h)	35	503	362	479	130	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	547	393	521	141	10
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	914				1003	457
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	914				1003	457
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				38	98
cM capacity (veh/h)	742				226	551

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	220	365	262	652	151
Volume Left	38	0	0	0	141
Volume Right	0	0	0	521	10
cSH	742	1700	1700	1700	236
Volume to Capacity	0.05	0.21	0.15	0.38	0.64
Queue Length 95th (m)	1.2	0.0	0.0	0.0	29.7
Control Delay (s/veh)	2.2	0.0	0.0	0.0	44.0
Lane LOS	A				E
Approach Delay (s/veh)	0.8		0.0		44.0
Approach LOS					E

Intersection Summary				
Average Delay	4.3			
Intersection Capacity Utilization	54.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	326	222	175	0	0	110
Future Volume (vph)	326	222	175	0	0	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.971				
Satd. Flow (prot)	0	3475	3579	0	1629	0
Flt Permitted		0.971				
Satd. Flow (perm)	0	3475	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	326	222	175	0	0	110
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	548	175	0	110	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	326	222	175	0	0	110
Future Volume (Veh/h)	326	222	175	0	0	110
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	326	222	175	0	0	110
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	175				938	88
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	175				938	88
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	77				100	88
cM capacity (veh/h)	1399				202	953

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	400	148	117	58	110
Volume Left	326	0	0	0	0
Volume Right	0	0	0	0	110
cSH	1399	1700	1700	1700	953
Volume to Capacity	0.23	0.09	0.07	0.03	0.12
Queue Length 95th (m)	6.9	0.0	0.0	0.0	3.0
Control Delay (s/veh)	7.2	0.0	0.0	0.0	9.3
Lane LOS	A				A
Approach Delay (s/veh)	5.2		0.0		9.3
Approach LOS					A

Intersection Summary				
Average Delay	4.7			
Intersection Capacity Utilization	39.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	222	0	0	0	0	175
Future Volume (vph)	222	0	0	0	0	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			52.5	161.7	
Travel Time (s)	55.9			3.9	12.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	241	0	0	0	0	190
Shared Lane Traffic (%)						
Lane Group Flow (vph)	241	0	0	0	0	190
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	15.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	222	0	0	0	0	175
Future Volume (vph)	222	0	0	0	0	175
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	241	0	0	0	0	190

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	241	0	190
Volume Left (vph)	241	0	0
Volume Right (vph)	0	0	190
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	5.5	4.9	4.0
Degree Utilization, x	0.36	0.00	0.21
Capacity (veh/h)	636	726	844
Control Delay (s/veh)	10.4	6.7	8.1
Approach Delay (s/veh)	10.4		8.1
Approach LOS	B		A

Intersection Summary			
Delay	9.4		
Level of Service	A		
Intersection Capacity Utilization	15.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	18	54	0	0	0
Future Volume (vph)	0	18	54	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	11.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	20	59	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	59	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	18	54	0	0	0
Future Volume (Veh/h)	0	18	54	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	59	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	118	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	118	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	96			
cM capacity (veh/h)	846	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	20	59	0
Volume Left	0	59	0
Volume Right	20	0	0
cSH	1085	1623	1700
Volume to Capacity	0.02	0.04	0.00
Queue Length 95th (m)	0.4	0.9	0.0
Control Delay (s/veh)	8.4	7.3	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	7.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	7.6		
Intersection Capacity Utilization	13.3%	ICU Level of Service	A
Analysis Period (min)	15		

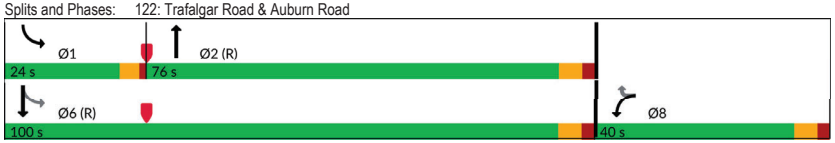
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	32	72	2210	186	180	1919
Future Volume (vph)	32	72	2210	186	180	1919
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.988			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4368	0	1711	4421
Flt Permitted	0.950				0.038	
Satd. Flow (perm)	1789	1601	4368	0	68	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		72	12			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	32	72	2210	186	180	1919
Shared Lane Traffic (%)						
Lane Group Flow (vph)	32	72	2396	0	180	1919
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		5.0	20.0
Minimum Split (s)	40.0	40.0	40.0		9.5	40.0
Total Split (s)	40.0	40.0	76.0		24.0	100.0
Total Split (%)	28.6%	28.6%	54.3%		17.1%	71.4%
Maximum Green (s)	34.0	34.0	70.0		19.5	94.0
Yellow Time (s)	4.0	4.0	4.0		3.5	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Don't Walk (s)	9.0	9.0	27.0			27.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	10.2	10.2	102.1		122.5	122.2
Actuated g/C Ratio	0.07	0.07	0.73		0.88	0.87
v/c Ratio	0.25	0.39	0.75		0.79	0.50
Control Delay (s/veh)	66.3	19.6	3.5		61.1	3.1
Queue Delay	0.0	0.0	0.2		0.0	0.0
Total Delay (s/veh)	66.3	19.6	3.7		61.1	3.1
LOS	E	B	A		E	A
Approach Delay (s/veh)	34.0		3.7			8.1
Approach LOS	C		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 6.4		Intersection LOS: A	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	32	72	2396	180	1919
v/c Ratio	0.25	0.39	0.75	0.79	0.50
Control Delay (s/veh)	66.3	19.6	3.5	61.1	3.1
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	66.3	19.6	3.7	61.1	3.1
Queue Length 50th (m)	8.7	0.0	20.6	34.4	48.4
Queue Length 95th (m)	19.6	15.6	m20.6	58.3	57.7
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	434	443	3187	292	3860
Starvation Cap Reductn	0	0	202	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.16	0.80	0.62	0.50

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	32	72	2210	186	180	1919
Future Volume (vph)	32	72	2210	186	180	1919
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		4.5	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4369		1711	4421
Flt Permitted	0.95	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1789	1601	4369		68	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	32	72	2210	186	180	1919
RTOR Reduction (vph)	0	68	3	0	0	0
Lane Group Flow (vph)	32	4	2393	0	180	1919
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	8.2	8.2	100.8		119.8	119.8
Effective Green, g (s)	8.2	8.2	100.8		119.8	119.8
Actuated g/C Ratio	0.06	0.06	0.72		0.86	0.86
Clearance Time (s)	6.0	6.0	6.0		4.5	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	104	93	3145		228	3783
v/s Ratio Prot	c0.02		0.55		c0.08	0.43
v/s Ratio Perm		0.00			c0.59	
v/c Ratio	0.31	0.05	0.76		0.79	0.51
Uniform Delay, d1	63.2	62.2	12.1		45.3	2.6
Progression Factor	1.00	1.00	0.25		1.00	1.00
Incremental Delay, d2	1.7	0.2	0.2		16.4	0.5
Delay (s)	64.9	62.4	3.2		61.7	3.1
Level of Service	E	E	A		E	A
Approach Delay (s/veh)	63.2		3.2			8.1
Approach LOS	E		A			A

Intersection Summary

HCM 2000 Control Delay (s/veh)	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	19	55	54	18	0
Future Volume (vph)	0	19	55	54	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.975		
Satd. Flow (prot)	1629	0	0	1836	1883	0
Flt Permitted				0.975		
Satd. Flow (perm)	1629	0	0	1836	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	19	55	54	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	19	0	0	109	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	22.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	19	55	54	18	0
Future Volume (Veh/h)	0	19	55	54	18	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	19	55	54	18	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	182	18	18			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	182	18	18			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	97			
cM capacity (veh/h)	780	1061	1599			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	19	109	18
Volume Left	0	55	0
Volume Right	19	0	0
cSH	1061	1599	1700
Volume to Capacity	0.02	0.03	0.01
Queue Length 95th (m)	0.4	0.8	0.0
Control Delay (s/veh)	8.5	3.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	3.8	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	22.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	49	62	30	60	70	81
Future Volume (vph)	49	62	30	60	70	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.925		0.910			
Flt Protected	0.978					0.977
Satd. Flow (prot)	1629	0	1639	0	0	1759
Flt Permitted	0.978					0.977
Satd. Flow (perm)	1629	0	1639	0	0	1759
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	67	33	65	76	88
Shared Lane Traffic (%)						
Lane Group Flow (vph)	120	0	98	0	0	164
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	28.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	49	62	30	60	70	81
Future Volume (Veh/h)	49	62	30	60	70	81
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	67	33	65	76	88
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	306	66			98	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	306	66			98	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	93			95	
cM capacity (veh/h)	652	998			1495	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	120	98	164
Volume Left	53	0	76
Volume Right	67	65	0
cSH	808	1700	1495
Volume to Capacity	0.15	0.06	0.05
Queue Length 95th (m)	4.0	0.0	1.2
Control Delay (s/veh)	10.2	0.0	3.7
Lane LOS	B		A
Approach Delay (s/veh)	10.2	0.0	3.7
Approach LOS	B		

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	28.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	196	11	57	149	1	17	19	49	133	6	0
Future Volume (vph)	0	196	11	57	149	1	17	19	49	133	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.993			0.999			0.922				
Flt Protected					0.986			0.990			0.954	
Satd. Flow (prot)	0	1870	0	0	1774	0	0	1719	0	0	1797	0
Flt Permitted					0.986			0.990			0.954	
Satd. Flow (perm)	0	1870	0	0	1774	0	0	1719	0	0	1797	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	213	12	62	162	1	18	21	53	145	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	225	0	0	225	0	0	92	0	0	152	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	196	11	57	149	1	17	19	49	133	6	0
Future Volume (Veh/h)	0	196	11	57	149	1	17	19	49	133	6	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	213	12	62	162	1	18	21	53	145	7	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	163			225			509	506	219	569	512	163
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	163			225			509	506	219	569	512	163
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			95			96	95	94	62	98	100
cM capacity (veh/h)	1416			1344			452	447	821	377	444	882

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	225	225	92	152
Volume Left	0	62	18	145
Volume Right	12	1	53	0
cSH	1416	1344	608	379
Volume to Capacity	0.00	0.05	0.15	0.40
Queue Length 95th (m)	0.0	1.1	4.0	14.3
Control Delay (s/veh)	0.0	2.4	12.0	20.7
Lane LOS		A	B	C
Approach Delay (s/veh)	0.0	2.4	12.0	20.7
Approach LOS			B	C

Intersection Summary				
Average Delay		6.9		
Intersection Capacity Utilization		46.4%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	351	64	23	147	42	53
Future Volume (vph)	351	64	23	147	42	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.979				0.925	
Flt Protected				0.993	0.978	
Satd. Flow (prot)	1844	0	0	1870	1704	0
Flt Permitted				0.993	0.978	
Satd. Flow (perm)	1844	0	0	1870	1704	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	382	70	25	160	46	58
Shared Lane Traffic (%)						
Lane Group Flow (vph)	452	0	0	185	104	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		14	24		24	14
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	39.4%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	3	87	11	0	130
Future Volume (vph)	18	3	87	11	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.982		0.985			
Flt Protected	0.958					
Satd. Flow (prot)	1636	0	1774	0	0	1801
Flt Permitted	0.958					
Satd. Flow (perm)	1636	0	1774	0	0	1801
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	3	95	12	0	141
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	0	107	0	0	141
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	18	3	87	11	0	130
Future Volume (Veh/h)	18	3	87	11	0	130
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	20	3	95	12	0	141
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	242	101			107	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	242	101			107	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	97	100			100	
cM capacity (veh/h)	746	954			1484	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	23	107	141
Volume Left	20	0	0
Volume Right	3	12	0
cSH	768	1700	1484
Volume to Capacity	0.03	0.06	0.00
Queue Length 95th (m)	0.7	0.0	0.0
Control Delay (s/veh)	9.8	0.0	0.0
Lane LOS	A		
Approach Delay (s/veh)	9.8	0.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	16.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	49	6	8	17	13	3	70	4	5	69	0
Future Volume (vph)	2	49	6	8	17	13	3	70	4	5	69	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.954			0.993				
Flt Protected		0.998			0.989			0.998			0.997	
Satd. Flow (prot)	0	1709	0	0	1640	0	0	1784	0	0	1795	0
Flt Permitted		0.998			0.989			0.998			0.997	
Satd. Flow (perm)	0	1709	0	0	1640	0	0	1784	0	0	1795	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	53	7	9	18	14	3	76	4	5	75	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	62	0	0	41	0	0	83	0	0	80	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	49	6	8	17	13	3	70	4	5	69	0
Future Volume (Veh/h)	2	49	6	8	17	13	3	70	4	5	69	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	53	7	9	18	14	3	76	4	5	75	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	192	171	75	203	169	78	75			80		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	192	171	75	203	169	78	75			80		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	93	99	99	98	99	100			100		
cM capacity (veh/h)	739	718	986	705	720	983	1524			1518		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	62	41	83	80
Volume Left	2	9	3	5
Volume Right	7	14	4	0
cSH	742	788	1524	1518
Volume to Capacity	0.08	0.05	0.00*	0.00*
Queue Length 95th (m)	2.1	1.2	0.0	0.1
Control Delay (s/veh)	10.3	9.8	0.3	0.5
Lane LOS	B	A	A	A
Approach Delay (s/veh)	10.3	9.8	0.3	0.5
Approach LOS	B	A		

Intersection Summary				
Average Delay		4.1		
Intersection Capacity Utilization		17.8%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	115	19	0	25	0	30	161	32	0	90	8
Future Volume (vph)	5	115	19	0	25	0	30	161	32	0	90	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.981						0.981			0.989	
Flt Protected		0.998						0.993				
Satd. Flow (prot)	0	1844	0	0	1883	0	0	1754	0	0	1781	0
Flt Permitted		0.998						0.993				
Satd. Flow (perm)	0	1844	0	0	1883	0	0	1754	0	0	1781	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	125	21	0	27	0	33	175	35	0	98	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	151	0	0	27	0	0	243	0	0	107	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	115	19	0	25	0	30	161	32	0	90	8
Future Volume (Veh/h)	5	115	19	0	25	0	30	161	32	0	90	8
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	125	21	0	27	0	33	175	35	0	98	9
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	375	379	103	445	366	193	107			210		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	375	379	103	445	366	193	107			210		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	77	98	100	95	100	98			100		
cM capacity (veh/h)	551	541	953	414	550	849	1484			1361		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	151	27	243	107
Volume Left	5	0	33	0
Volume Right	21	0	35	9
cSH	576	550	1484	1361
Volume to Capacity	0.26	0.05	0.02	0.00
Queue Length 95th (m)	7.9	1.2	0.5	0.0
Control Delay (s/veh)	13.5	11.9	1.2	0.0
Lane LOS	B	B	A	
Approach Delay (s/veh)	13.5	11.9	1.2	0.0
Approach LOS	B	B		

Intersection Summary				
Average Delay		5.0		
Intersection Capacity Utilization		36.7%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	125	14	9	123	5	14	25	8	2	66	80
Future Volume (vph)	68	125	14	9	123	5	14	25	8	2	66	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.991			0.995			0.976			0.927	
Flt Protected		0.984			0.997			0.986			0.999	
Satd. Flow (prot)	0	1695	0	0	1786	0	0	1733	0	0	1668	0
Flt Permitted		0.984			0.997			0.986			0.999	
Satd. Flow (perm)	0	1695	0	0	1786	0	0	1733	0	0	1668	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	136	15	10	134	5	15	27	9	2	72	87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	225	0	0	149	0	0	51	0	0	161	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	125	14	9	123	5	14	25	8	2	66	80
Future Volume (Veh/h)	68	125	14	9	123	5	14	25	8	2	66	80
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	136	15	10	134	5	15	27	9	2	72	87
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	253	186	116	264	225	32	159			36		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	253	186	116	264	225	32	159			36		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	87	81	98	98	80	100	99			100		
cM capacity (veh/h)	584	700	937	572	667	1043	1420			1575		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	225	149	51	161
Volume Left	74	10	15	2
Volume Right	15	5	9	87
cSH	668	667	1420	1575
Volume to Capacity	0.34	0.22	0.01	0.00*
Queue Length 95th (m)	11.3	6.5	0.2	0.0
Control Delay (s/veh)	13.1	11.9	2.3	0.1
Lane LOS	B	B	A	A
Approach Delay (s/veh)	13.1	11.9	2.3	0.1
Approach LOS	B	B		

Intersection Summary				
Average Delay	8.3			
Intersection Capacity Utilization	39.9%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	159	0	12	118	50	1	17	5	35	36	12
Future Volume (vph)	11	159	0	12	118	50	1	17	5	35	36	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.963			0.972			0.980	
Flt Protected		0.997			0.997			0.998			0.979	
Satd. Flow (prot)	0	1795	0	0	1729	0	0	1747	0	0	1728	0
Flt Permitted		0.997			0.997			0.998			0.979	
Satd. Flow (perm)	0	1795	0	0	1729	0	0	1747	0	0	1728	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	173	0	13	128	54	1	18	5	38	39	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	185	0	0	195	0	0	24	0	0	90	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

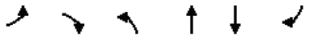
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	159	0	12	118	50	1	17	5	35	36	12
Future Volume (Veh/h)	11	159	0	12	118	50	1	17	5	35	36	12
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	173	0	13	128	54	1	18	5	38	39	13
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	182			173			411	405	173	392	378	155
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	182			173			411	405	173	392	378	155
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	97	99	93	93	99
cM capacity (veh/h)	1393			1404			507	525	871	542	544	891

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	185	195	24	90
Volume Left	12	13	1	38
Volume Right	0	54	5	13
cSH	1393	1404	572	575
Volume to Capacity	0.00*	0.00*	0.04	0.16
Queue Length 95th (m)	0.2	0.2	1.0	4.2
Control Delay (s/veh)	0.6	0.6	11.6	12.4
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.6	0.6	11.6	12.4
Approach LOS			B	B

Intersection Summary				
Average Delay		3.3		
Intersection Capacity Utilization		30.8%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	124	106	42	144	34	63
Future Volume (vph)	124	106	42	144	34	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.938				0.913	
Flt Protected	0.974		0.950			
Satd. Flow (prot)	1645	0	1711	0	1644	0
Flt Permitted	0.974		0.950			
Satd. Flow (perm)	1645	0	1711	0	1644	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	135	115	46	157	37	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	250	0	46	157	105	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			3.3	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	124	106	42	144	34	63
Future Volume (Veh/h)	124	106	42	144	34	63
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	135	115	46	157	37	68
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	320	71	105			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	320	71	105			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	79	88	97			
cM capacity (veh/h)	653	991	1486			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	250	46	105
Volume Left	135	46	0
Volume Right	115	0	68
cSH	774	1486	1700
Volume to Capacity	0.32	0.03	0.06
Queue Length 95th (m)	10.6	0.7	0.0
Control Delay (s/veh)	11.8	7.5	0.0
Lane LOS	B	A	
Approach Delay (s/veh)	11.8	Err	0.0
Approach LOS	B		

Intersection Summary					
Average Delay		Err			
Intersection Capacity Utilization		Err%	ICU Level of Service		H
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	10	60	28	17	0
Future Volume (vph)	0	10	60	28	17	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.967		
Satd. Flow (prot)	1629	0	0	1821	1883	0
Flt Permitted				0.967		
Satd. Flow (perm)	1629	0	0	1821	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	364.2	
Travel Time (s)	16.7			24.3	18.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	11	65	30	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	0	0	95	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	21.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	10	60	28	17	0
Future Volume (Veh/h)	0	10	60	28	17	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	11	65	30	18	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	178	18	18			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	178	18	18			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	96			
cM capacity (veh/h)	779	1061	1599			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	11	95	18
Volume Left	0	65	0
Volume Right	11	0	0
cSH	1061	1599	1700
Volume to Capacity	0.01	0.04	0.01
Queue Length 95th (m)	0.2	1.0	0.0
Control Delay (s/veh)	8.4	5.1	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.4	5.1	0.0
Approach LOS	A		

Intersection Summary				
Average Delay	4.7			
Intersection Capacity Utilization	21.5%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	17	139	0	14	13	7
Future Volume (vph)	17	139	0	14	13	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.879				0.951	
Flt Protected					0.969	
Satd. Flow (prot)	1583	0	0	1801	1659	0
Flt Permitted					0.969	
Satd. Flow (perm)	1583	0	0	1801	1659	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	18	151	0	15	14	8
Shared Lane Traffic (%)						
Lane Group Flow (vph)	169	0	0	15	22	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	17	139	0	14	13	7
Future Volume (Veh/h)	17	139	0	14	13	7
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	18	151	0	15	14	8
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	36	0	192	32	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	36	0	192	32	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	98	86	100	98	99	
cM capacity (veh/h)	849	1085	646	853	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	169	15	22
Volume Left	0	0	14
Volume Right	151	0	8
cSH	1054	853	1623
Volume to Capacity	0.16	0.02	0.00*
Queue Length 95th (m)	4.3	0.4	0.2
Control Delay (s/veh)	9.1	9.3	4.6
Lane LOS	A	A	A
Approach Delay (s/veh)	9.1	9.3	4.6
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.6		
Intersection Capacity Utilization	19.5%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

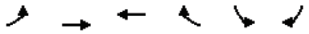
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	76	33	59	75	1
Future Volume (vph)	2	76	33	59	75	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.868				0.998	
Flt Protected	0.999			0.982		
Satd. Flow (prot)	1508	0	0	1768	1797	0
Flt Permitted	0.999			0.982		
Satd. Flow (perm)	1508	0	0	1768	1797	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	83	36	64	82	1
Shared Lane Traffic (%)						
Lane Group Flow (vph)	85	0	0	100	83	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	23.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	76	33	59	75	1
Future Volume (Veh/h)	2	76	33	59	75	1
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	83	36	64	82	1
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	219	83	83			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	219	83	83			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	92	98			
cM capacity (veh/h)	751	977	1514			

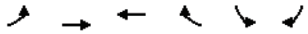
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	85	100	83
Volume Left	2	36	0
Volume Right	83	0	1
cSH	970	1514	1700
Volume to Capacity	0.09	0.02	0.05
Queue Length 95th (m)	2.2	0.6	0.0
Control Delay (s/veh)	9.1	2.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	9.1	2.8	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.9		
Intersection Capacity Utilization	23.1%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	37	375	172	109	195	62
Future Volume (vph)	37	375	172	109	195	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.948		0.968	
Flt Protected		0.996			0.963	
Satd. Flow (prot)	0	1793	1707	0	1621	0
Flt Permitted		0.996			0.963	
Satd. Flow (perm)	0	1793	1707	0	1621	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	408	187	118	212	67
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	448	305	0	279	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.1%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	375	172	109	195	62
Future Volume (Veh/h)	37	375	172	109	195	62
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	40	408	187	118	212	67
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.96				0.96	0.96
vC, conflicting volume	305				734	246
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	254				701	192
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				44	92
cM capacity (veh/h)	1257				376	815

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	448	305	279
Volume Left	40	0	212
Volume Right	0	118	67
cSH	1257	1700	432
Volume to Capacity	0.03	0.18	0.65
Queue Length 95th (m)	0.7	0.0	33.8
Control Delay (s/veh)	1.0	0.0	27.3
Lane LOS	A		D
Approach Delay (s/veh)	1.0	0.0	27.3
Approach LOS			D

Intersection Summary			
Average Delay	7.8		
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	118	9	6	53	38	16
Future Volume (vph)	118	9	6	53	38	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.990				0.960	
Flt Protected				0.995	0.966	
Satd. Flow (prot)	1721	0	0	1730	1670	0
Flt Permitted				0.995	0.966	
Satd. Flow (perm)	1721	0	0	1730	1670	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	128	10	7	58	41	17
Shared Lane Traffic (%)						
Lane Group Flow (vph)	138	0	0	65	58	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	118	9	6	53	38	16
Future Volume (Veh/h)	118	9	6	53	38	16
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	128	10	7	58	41	17
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	99	0	165	91	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	99	0	165	91	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	83	99	99	93	97	
cM capacity (veh/h)	771	1085	679	779	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	138	65	58
Volume Left	0	7	41
Volume Right	10	0	17
cSH	788	767	1623
Volume to Capacity	0.18	0.08	0.03
Queue Length 95th (m)	4.8	2.1	0.6
Control Delay (s/veh)	10.5	10.1	5.2
Lane LOS	B	B	A
Approach Delay (s/veh)	10.5	10.1	5.2
Approach LOS	B	B	

Intersection Summary			
Average Delay	9.2		
Intersection Capacity Utilization	17.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	145	263	85	19	1	309	4	76	9	6	65
Future Volume (vph)	19	145	263	85	19	1	309	4	76	9	6	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.917			0.999			0.974			0.891	
Flt Protected		0.998			0.961			0.962			0.994	
Satd. Flow (prot)	0	1648	0	0	1729	0	0	1687	0	0	1595	0
Flt Permitted		0.998			0.961			0.962			0.994	
Satd. Flow (perm)	0	1648	0	0	1729	0	0	1687	0	0	1595	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	158	286	92	21	1	336	4	83	10	7	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	465	0	0	114	0	0	423	0	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 69.2%		ICU Level of Service C	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	145	263	85	19	1	309	4	76	9	6	65
Future Volume (Veh/h)	19	145	263	85	19	1	309	4	76	9	6	65
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	158	286	92	21	1	336	4	83	10	7	71
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked				0.96			0.96	0.96	0.96	0.96	0.96	
vC, conflicting volume	22			444			623	549	301	634	692	22
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	22			396			583	505	246	594	654	22
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			92			3	99	89	97	98	93
cM capacity (veh/h)	1593			1112			345	406	758	327	334	1056

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	465	114	423	88
Volume Left	21	92	336	10
Volume Right	286	1	83	71
cSH	1593	1112	387	741
Volume to Capacity	0.01	0.08	1.09	0.12
Queue Length 95th (m)	0.3	2.1	114.3	3.1
Control Delay (s/veh)	0.5	7.0	106.0	10.5
Lane LOS	A	A	F	B
Approach Delay (s/veh)	0.5	7.0	106.0	10.5
Approach LOS			F	B

Intersection Summary					
Average Delay		42.9			
Intersection Capacity Utilization		69.2%	ICU Level of Service		C
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	6	2	45	87	2
Future Volume (vph)	2	6	2	45	87	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.895				0.997	
Flt Protected	0.989			0.998		
Satd. Flow (prot)	1539	0	0	1797	1795	0
Flt Permitted	0.989			0.998		
Satd. Flow (perm)	1539	0	0	1797	1795	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	7	2	49	95	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	0	0	51	97	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	6	2	45	87	2
Future Volume (Veh/h)	2	6	2	45	87	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	7	2	49	95	2
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	149	96	97			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	149	96	97			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	842	960	1496			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	9	51	97
Volume Left	2	2	0
Volume Right	7	0	2
cSH	931	1496	1700
Volume to Capacity	0.00*	0.00*	0.06
Queue Length 95th (m)	0.2	0.0	0.0
Control Delay (s/veh)	8.9	0.3	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.9	0.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	14.7%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	33	33	0	0	98	130	98	0	44	0
Future Volume (vph)	0	0	33	33	0	0	98	130	98	0	44	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.959				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	33	33	0	0	98	130	98	0	44	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	33	0	0	33	0	0	326	0	0	44	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	33	33	0	0	98	130	98	0	44	0
Future Volume (Veh/h)	0	0	33	33	0	0	98	130	98	0	44	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	33	33	0	0	98	130	98	0	44	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			33			105	83	17	246	99	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			33			105	83	17	246	99	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			88	84	91	100	94	100
cM capacity (veh/h)	1623			1579			824	791	1063	553	775	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	33	33	326	44
Volume Left	0	33	98	0
Volume Right	33	0	98	0
cSH	1623	1579	868	775
Volume to Capacity	0.00	0.02	0.38	0.06
Queue Length 95th (m)	0.0	0.5	13.4	1.4
Control Delay (s/veh)	0.0	7.3	11.6	9.9
Lane LOS		A	B	A
Approach Delay (s/veh)	0.0	7.3	11.6	9.9
Approach LOS			B	A

Intersection Summary				
Average Delay		10.2		
Intersection Capacity Utilization		40.1%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	11	30	88	27	0
Future Volume (vph)	0	11	30	88	27	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.850					
Flt Protected				0.987		
Satd. Flow (prot)	0	0	0	1859	1883	0
Flt Permitted				0.987		
Satd. Flow (perm)	0	0	0	1859	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			22.6	24.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	12	33	96	29	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	0	0	129	29	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	11	30	88	27	0
Future Volume (Veh/h)	0	11	30	88	27	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	12	33	96	29	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	191	29	29			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	191	29	29			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	98			
cM capacity (veh/h)	781	1046	1584			

Direction, Lane #	NB 1	SB 1
Volume Total	129	29
Volume Left	33	0
Volume Right	0	0
cSH	1584	1700
Volume to Capacity	0.02	0.02
Queue Length 95th (m)	0.5	0.0
Control Delay (s/veh)	2.0	0.0
Lane LOS	A	
Approach Delay (s/veh)	2.0	0.0
Approach LOS		

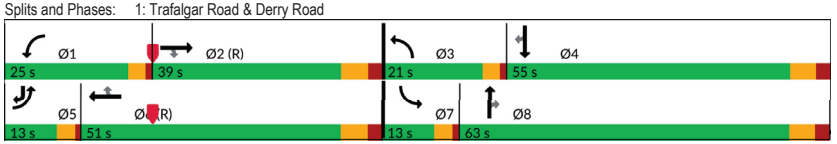
Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
Future Volume (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			184			123			157			124
Link Speed (k/h)		80			80			60			60	
Link Distance (m)		199.1			212.0			357.0			332.8	
Travel Time (s)		9.0			9.5			21.4			20.0	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Adj. Flow (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	6.1	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	6.1	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	5
Switch Phase												
Minimum Initial (s)	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	20.0	7.0	20.0	7.0
Minimum Split (s)	11.0	37.9	37.9	11.0	37.9	37.9	11.0	36.8	36.8	11.0	36.8	11.0
Total Split (s)	13.0	39.0	39.0	25.0	51.0	51.0	21.0	63.0	63.0	13.0	55.0	13.0
Total Split (%)	9.3%	27.9%	27.9%	17.9%	36.4%	36.4%	15.0%	45.0%	45.0%	9.3%	39.3%	9.3%
Maximum Green (s)	9.0	32.1	32.1	21.0	44.1	44.1	17.0	56.2	56.2	9.0	48.2	9.0
Yellow Time (s)	3.0	4.6	4.6	3.0	4.6	4.6	3.0	4.2	4.2	3.0	4.2	3.0
All-Red Time (s)	1.0	2.3	2.3	1.0	2.3	2.3	1.0	2.6	2.6	1.0	2.6	1.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	
Flash Don't Walk (s)		24.0	24.0		24.0	24.0		23.0	23.0		23.0	
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	
Act Effct Green (s)	10.0	34.1	34.1	22.0	46.1	46.1	18.0	58.2	58.2	10.0	50.2	66.0
Actuated g/C Ratio	0.07	0.24	0.24	0.16	0.33	0.33	0.13	0.42	0.42	0.07	0.36	0.47
v/c Ratio	1.13	0.75	0.46	1.01	1.17	0.25	1.19	1.23	0.43	1.18	1.24	0.73
Control Delay (s/veh)	162.4	48.1	10.9	105.2	122.4	13.3	141.7	128.7	4.9	150.9	156.2	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	162.4	48.1	10.9	105.2	122.4	13.3	141.7	128.7	4.9	150.9	156.2	40.4
LOS	F	D	B	F	F	B	F	F	A	F	F	D
Approach Delay (s/veh)		63.6			112.8			117.6			131.0	
Approach LOS		E			F			F			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 11 (8%), Referenced to phase 2:EBT and 6:WBT, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.24		
Intersection Signal Delay (s/veh): 112.2		Intersection LOS: F
Intersection Capacity Utilization 111.6%		ICU Level of Service H
Analysis Period (min) 15		
* User Entered Value		

Splits and Phases: 1: Trafalgar Road & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
v/c Ratio	1.13	0.75	0.46	1.01	1.17	0.25	1.19	1.23	0.43	1.18	1.24	0.73
Control Delay (s/veh)	162.4	48.1	10.9	105.2	122.4	13.3	141.7	128.7	4.9	150.9	156.2	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	162.4	48.1	10.9	105.2	122.4	13.3	141.7	128.7	4.9	150.9	156.2	40.4
Queue Length 50th (m)	~48.0	89.7	7.7	~78.5	~240.1	3.7	~84.3	~323.8	23.1	~45.8	~292.0	141.9
Queue Length 95th (m)	#79.1	106.2	23.1	#123.5	#270.2	m20.0	m#75.2	m#280.5	m20.0	m#56.4	#327.3	m180.4
Internal Link Dist (m)		175.1			188.0			333.0			308.8	
Turn Bay Length (m)	130.0		110.0	130.0		70.0	110.0		70.0	130.0		85.0
Base Capacity (vph)	240	1240	521	550	1709	609	407	1768	742	228	1525	803
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.13	0.75	0.46	1.01	1.17	0.25	1.19	1.23	0.43	1.18	1.24	0.73

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
Future Volume (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.9	4.9	3.0	4.9	4.9	3.0	4.8	4.8	3.0	4.8	2.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3372	5092	1570	3506	5193	1601	3173	4254	1566	3204	4254	1566
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	272	925	238	556	2001	152	485	2181	317	268	1894	586
RTOR Reduction (vph)	0	0	139	0	0	82	0	0	92	0	0	70
Lane Group Flow (vph)	272	925	99	556	2001	70	485	2181	225	268	1894	516
Heavy Vehicles (%)	5%	3%	4%	1%	1%	2%	3%	6%	2%	2%	6%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	5	2		1	6		3	8		7	4	5
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.0	32.1	32.1	21.0	44.1	44.1	17.0	56.2	56.2	9.0	48.2	57.2
Effective Green, g (s)	10.0	34.1	34.1	22.0	46.1	46.1	18.0	58.2	58.2	10.0	50.2	61.2
Actuated g/C Ratio	0.07	0.24	0.24	0.16	0.33	0.33	0.13	0.42	0.42	0.07	0.36	0.44
Clearance Time (s)	4.0	6.9	6.9	4.0	6.9	6.9	4.0	6.8	6.8	4.0	6.8	4.0
Vehicle Extension (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Grp Cap (vph)	240	1240	382	550	1709	527	407	1768	651	228	1525	684
v/s Ratio Prot	c0.08	0.18		c0.16	c0.39		c0.15	c0.51		0.08	0.45	0.06
v/s Ratio Perm			0.06			0.04			0.14			0.27
v/c Ratio	1.13	0.75	0.26	1.01	1.17	0.13	1.19	1.23	0.35	1.18	1.24	0.75
Uniform Delay, d1	65.0	48.9	42.7	59.0	47.0	32.9	61.0	40.9	27.9	65.0	44.9	33.1
Progression Factor	1.18	0.90	0.71	1.26	0.98	1.44	1.05	0.52	0.34	0.94	1.21	1.60
Incremental Delay, d2	97.5	3.9	1.6	33.7	81.3	0.3	88.6	105.6	0.1	99.1	111.7	2.8
Delay (s)	174.4	47.9	31.7	107.9	127.4	47.8	152.9	126.7	9.4	160.5	165.9	55.6
Level of Service	F	D	C	F	F	D	F	F	A	F	F	E
Approach Delay (s/veh)		69.2			119.0			118.5			141.8	
Approach LOS		E			F			F			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	117.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	111.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

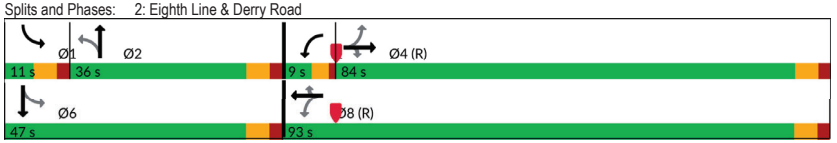
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1190	169	74	2330	11	133	21	96	31	54	10
Future Volume (vph)	14	1190	169	74	2330	11	133	21	96	31	54	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	90.0		70.0	140.0		70.0	50.0		0.0	35.0		70.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.877			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1679	0	1825	1877	0
Flt Permitted	0.045			0.154			0.715			0.450		
Satd. Flow (perm)	86	4520	1555	296	4565	1633	1374	1679	0	864	1877	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169			70		96			6	
Link Speed (k/h)		80			80			70			70	
Link Distance (m)		363.9			1167.6			383.1			438.8	
Travel Time (s)		16.4			52.5			19.7			22.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Adj. Flow (vph)	14	1190	169	74	2330	11	133	21	96	31	54	10
Shared Lane Traffic (%)												
Lane Group Flow (vph)	14	1190	169	74	2330	11	133	117	0	31	64	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	6.1	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	6.1	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8		8	2			6		
Detector Phase	4	4	4	3	8	8	2	2		1	6	
Switch Phase												
Minimum Initial (s)	20.0	20.0	20.0	5.0	20.0	20.0	10.0	10.0		5.0	10.0	
Minimum Split (s)	36.0	36.0	36.0	9.0	36.0	36.0	36.0	36.0		11.0	36.0	
Total Split (s)	84.0	84.0	84.0	9.0	93.0	93.0	36.0	36.0		11.0	47.0	
Total Split (%)	60.0%	60.0%	60.0%	6.4%	66.4%	66.4%	25.7%	25.7%		7.9%	33.6%	
Maximum Green (s)	78.0	78.0	78.0	5.0	87.0	87.0	30.0	30.0		5.0	41.0	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag		Lead		
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min	C-Min	None	C-Min	C-Min	None	None		None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)	23.0	23.0	23.0		23.0	23.0	23.0	23.0			23.0	
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0			0	
Act Effct Green (s)	92.3	92.3	92.3	103.5	101.5	101.5	18.8	18.8		26.5	26.5	
Actuated g/C Ratio	0.66	0.66	0.66	0.74	0.73	0.73	0.13	0.13		0.19	0.19	
v/c Ratio	0.25	0.40	0.16	0.25	0.70	0.01	0.72	0.38		0.15	0.18	
Control Delay (s/veh)	34.9	14.1	6.4	8.8	14.1	0.0	69.3	20.2		43.1	40.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	34.9	14.1	6.4	8.8	14.1	0.0	69.3	20.2		43.1	40.2	
LOS	C	B	A	A	B	A	E	C		D	D	
Approach Delay (s/veh)		13.4			13.9			46.3			41.1	
Approach LOS		B			B			D			D	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 69 (49%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green		
Natural Cycle: 105		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.72		
Intersection Signal Delay (s/veh): 16.3	Intersection LOS: B	
Intersection Capacity Utilization 85.5%	ICU Level of Service E	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 2: Eighth Line & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	14	1190	169	74	2330	11	133	117	31	64
v/c Ratio	0.25	0.40	0.16	0.25	0.70	0.01	0.72	0.38	0.15	0.18
Control Delay (s/veh)	34.9	14.1	6.4	8.8	14.1	0.0	69.3	20.2	43.1	40.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.9	14.1	6.4	8.8	14.1	0.0	69.3	20.2	43.1	40.2
Queue Length 50th (m)	1.7	64.8	8.9	5.9	160.4	0.0	38.1	17.6	6.8	12.9
Queue Length 95th (m)	m8.1	142.6	m21.1	12.3	204.9	0.0	58.0	31.6	14.7	24.3
Internal Link Dist (m)		339.9			1143.6			359.1		414.8
Turn Bay Length (m)	90.0		70.0	140.0		70.0	50.0		35.0	
Base Capacity (vph)	56	2980	1083	297	3310	1203	294	435	207	553
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.40	0.16	0.25	0.70	0.01	0.45	0.27	0.15	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	1190	169	74	2330	11	133	21	96	31	54	10
Future Volume (vph)	14	1190	169	74	2330	11	133	21	96	31	54	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4520	1555	1825	4565	1633	1825	1679		1825	1876	
Flt Permitted	0.04	1.00	1.00	0.15	1.00	1.00	0.72	1.00		0.45	1.00	
Satd. Flow (perm)	86	4520	1555	296	4565	1633	1374	1679		865	1876	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	14	1190	169	74	2330	11	133	21	96	31	54	10
RTOR Reduction (vph)	0	0	61	0	0	3	0	83	0	0	5	0
Lane Group Flow (vph)	14	1190	108	74	2330	8	133	34	0	31	59	0
Heavy Vehicles (%)	0%	2%	5%	0%	1%	0%	0%	2%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases		4		3	8			2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)	89.2	89.2	89.2	99.2	99.2	99.2	18.8	18.8		28.8	28.8	
Effective Green, g (s)	89.2	89.2	89.2	99.2	99.2	99.2	18.8	18.8		28.8	28.8	
Actuated g/C Ratio	0.64	0.64	0.64	0.71	0.71	0.71	0.13	0.13		0.21	0.21	
Clearance Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	54	2879	990	275	3234	1157	184	225		205	385	
v/s Ratio Prot		0.26		0.01	c0.51			0.02		0.00	c0.03	
v/s Ratio Perm	0.16		0.07	0.18		0.00	c0.10			0.03		
v/c Ratio	0.26	0.41	0.11	0.27	0.72	0.01	0.72	0.15		0.15	0.15	
Uniform Delay, d1	11.0	12.5	9.9	7.5	12.1	6.0	58.1	53.5		45.2	45.6	
Progression Factor	1.31	1.04	3.06	1.00	1.00	1.00	0.85	1.21		1.00	1.00	
Incremental Delay, d2	10.1	0.4	0.2	0.5	1.4	0.0	12.6	0.3		0.3	0.2	
Delay (s)	24.6	13.4	30.5	8.1	13.6	6.0	62.0	65.0		45.5	45.8	
Level of Service	C	B	C	A	B	A	E	E		D	D	
Approach Delay (s/veh)		15.6			13.4			63.4			45.7	
Approach LOS		B			B			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	17.9	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.73				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	22.0		
Intersection Capacity Utilization	85.5%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
Future Volume (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Storage Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			200			125			129			221
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1398.7			1361.0			3086.5			739.4	
Travel Time (s)		83.9			81.7			185.2			44.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Adj. Flow (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
Shared Lane Traffic (%)												
Lane Group Flow (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.09	1.01	1.01	1.09	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	2.0	10.0	2.0	2.0	10.0	2.0	6.1	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	2.0	0.6	2.0	2.0	0.6	2.0	6.1	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	7.0	15.0	15.0	7.0	15.0	15.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	11.0	40.0	40.0	11.0	40.0	40.0	11.0	41.0	41.0	11.0	41.0	41.0
Total Split (s)	16.0	40.0	40.0	16.0	40.0	40.0	22.0	73.0	73.0	11.0	62.0	62.0
Total Split (%)	11.4%	28.6%	28.6%	11.4%	28.6%	28.6%	15.7%	52.1%	52.1%	7.9%	44.3%	44.3%
Maximum Green (s)	12.0	34.0	34.0	12.0	34.0	34.0	18.0	66.0	66.0	7.0	55.0	55.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Don't Walk (s)		27.0	27.0		27.0	27.0		27.0	27.0		27.0	27.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	13.0	36.0	36.0	12.3	35.3	35.3	19.7	68.2	68.2	8.5	57.0	57.0
Actuated g/C Ratio	0.09	0.26	0.26	0.09	0.25	0.25	0.14	0.49	0.49	0.06	0.41	0.41
v/c Ratio	1.42	0.65	0.47	0.61	0.87	0.36	1.37	1.07	0.29	0.80	1.25	0.98
Control Delay (s/veh)	251.2	49.4	14.4	89.9	44.2	6.0	206.4	76.4	20.4	92.6	140.0	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	251.2	49.4	14.4	89.9	44.2	6.0	206.4	76.4	20.4	92.6	140.0	28.8
LOS	F	D	B	F	D	A	F	E	C	F	F	C
Approach Delay (s/veh)		100.4			45.7			97.9			110.8	
Approach LOS		F			D			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.42			
Intersection Signal Delay (s/veh): 94.8		Intersection LOS: F	
Intersection Capacity Utilization 104.7%		ICU Level of Service G	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 3: Trafalgar Road & Britannia Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
v/c Ratio	1.42	0.65	0.47	0.61	0.87	0.36	1.37	1.07	0.29	0.80	1.25	0.98
Control Delay (s/veh)	251.2	49.4	14.4	89.9	44.2	6.0	206.4	76.4	20.4	92.6	140.0	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	251.2	49.4	14.4	89.9	44.2	6.0	206.4	76.4	20.4	92.6	140.0	28.8
Queue Length 50th (m)	~86.6	78.7	13.9	25.2	112.3	3.1	~121.8	~291.7	30.8	21.5	~333.9	178.2
Queue Length 95th (m)	#123.4	96.0	39.9	41.5	92.7	8.1	m#111.9	m#219.6	m28.5	m21.1	m#272.7	m134.6
Internal Link Dist (m)		1374.7			1337.0			3062.5			715.4	
Turn Bay Length (m)	125.0		85.0	90.0		70.0	165.0		70.0	140.0		140.0
Base Capacity (vph)	283	1155	557	328	1173	489	450	2111	828	189	1748	756
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.42	0.64	0.47	0.58	0.85	0.35	1.37	1.07	0.29	0.80	1.25	0.98

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
Future Volume (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.0	3.5	3.5	3.0	3.5	3.5
Total Lost time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Util. Factor	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3052	4476	1585	3541	4565	1541	3204	4336	1566	3113	4295	1536
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	401	744	263	189	998	173	615	2249	237	152	2189	743
RTOR Reduction (vph)	0	0	149	0	0	93	0	0	66	0	0	131
Lane Group Flow (vph)	401	744	114	189	998	80	615	2249	171	152	2189	612
Heavy Vehicles (%)	16%	3%	3%	0%	1%	6%	2%	4%	2%	5%	5%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.0	34.0	34.0	11.3	33.3	33.3	18.7	66.2	66.2	7.5	55.0	55.0
Effective Green, g (s)	13.0	36.0	36.0	12.3	35.3	35.3	19.7	68.2	68.2	8.5	57.0	57.0
Actuated g/C Ratio	0.09	0.26	0.26	0.09	0.25	0.25	0.14	0.49	0.49	0.06	0.41	0.41
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	283	1150	407	311	1151	388	450	2112	762	189	1748	625
v/s Ratio Prot	c0.13	0.17		0.05	c0.22		c0.19	0.52		0.05	c0.51	
v/s Ratio Perm			0.07			0.05			0.11			0.40
v/c Ratio	1.42	0.65	0.28	0.61	0.87	0.20	1.37	1.06	0.22	0.80	1.25	0.98
Uniform Delay, d1	63.5	46.3	41.6	61.5	50.1	41.3	60.2	35.9	20.7	64.9	41.5	40.9
Progression Factor	1.00	1.00	1.00	1.33	0.71	0.31	0.88	1.36	2.15	1.31	0.58	0.47
Incremental Delay, d2	207.2	1.3	0.4	3.0	6.5	0.2	166.3	30.4	0.1	6.6	114.9	14.2
Delay (s)	270.7	47.6	42.0	85.1	42.3	13.1	219.3	79.1	44.6	91.5	139.1	33.5
Level of Service	F	D	D	F	D	B	F	E	D	F	F	C
Approach Delay (s/veh)		110.1			44.5			104.2			111.3	
Approach LOS		F			D			F			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	98.5	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.18			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.0	
Intersection Capacity Utilization	104.7%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1000	17	32	1278	64	53	153	61	106	167	57
Future Volume (vph)	20	1000	17	32	1278	64	53	153	61	106	167	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	70.0		70.0	100.0		70.0	70.0		0.0	120.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.957			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1818	0	1825	1795	0
Flt Permitted	0.129			0.238			0.619			0.264		
Satd. Flow (perm)	248	4476	1328	457	4520	1633	1189	1818	0	507	1795	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			56			91		13			13	
Link Speed (k/h)		60			60			70			70	
Link Distance (m)		1361.0			1408.0			3089.7			2700.9	
Travel Time (s)		81.7			84.5			158.9			138.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Adj. Flow (vph)	20	1000	17	32	1278	64	53	153	61	106	167	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	1000	17	32	1278	64	53	214	0	106	224	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (m)	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		
Detector Phase	5	2	2	6	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	15.0	15.0		5.0	15.0	
Minimum Split (s)	11.0	33.8	33.8	33.8	33.8	33.8	44.7	44.7		11.0	44.7	
Total Split (s)	11.0	87.0	87.0	76.0	76.0	76.0	38.0	38.0		15.0	53.0	
Total Split (%)	7.9%	62.1%	62.1%	54.3%	54.3%	54.3%	27.1%	27.1%		10.7%	37.9%	
Maximum Green (s)	6.5	80.2	80.2	69.2	69.2	69.2	32.3	32.3		10.5	47.3	
Yellow Time (s)	3.5	4.6	4.6	4.6	4.6	4.6	4.2	4.2		3.5	4.2	
All-Red Time (s)	1.0	2.2	2.2	2.2	2.2	2.2	1.5	1.5		1.0	1.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max	C-Max	C-Max	C-Max	C-Max	None	None		None	None	
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0			7.0	
Flash Don't Walk (s)		20.0	20.0	20.0	20.0	20.0	32.0	32.0			32.0	
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0			0	
Act Effct Green (s)	94.1	91.8	91.8	85.3	85.3	85.3	21.2	21.2		36.9	35.7	
Actuated g/C Ratio	0.67	0.66	0.66	0.61	0.61	0.61	0.15	0.15		0.26	0.26	
v/c Ratio	0.09	0.34	0.02	0.12	0.46	0.06	0.30	0.75		0.46	0.48	
Control Delay (s/veh)	5.4	4.8	0.1	16.5	17.0	1.4	45.8	57.7		38.8	38.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	5.4	4.8	0.1	16.5	17.0	1.4	45.8	57.7		38.8	38.0	
LOS	A	A	A	B	B	A	D	E		D	D	
Approach Delay (s/veh)		4.7			16.3			55.4			38.3	
Approach LOS		A			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay (s/veh): 18.2		Intersection LOS: B	
Intersection Capacity Utilization 66.8%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 4: Eighth Line & Britannia Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	20	1000	17	32	1278	64	53	214	106	224
v/c Ratio	0.09	0.34	0.02	0.12	0.46	0.06	0.30	0.75	0.46	0.48
Control Delay (s/veh)	5.4	4.8	0.1	16.5	17.0	1.4	45.8	57.7	38.8	38.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	5.4	4.8	0.1	16.5	17.0	1.4	45.8	57.7	38.8	38.0
Queue Length 50th (m)	0.6	13.9	0.0	3.9	84.3	0.0	11.9	51.0	21.7	46.4
Queue Length 95th (m)	m1.2	19.2	m0.0	10.8	112.7	3.5	24.3	75.6	25.2	52.9
Internal Link Dist (m)		1337.0			1384.0			3065.7		2676.9
Turn Bay Length (m)	70.0		70.0	100.0		70.0	70.0		120.0	
Base Capacity (vph)	240	2934	889	278	2752	1030	274	429	232	615
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.34	0.02	0.12	0.46	0.06	0.19	0.50	0.46	0.36

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	1000	17	32	1278	64	53	153	61	106	167	57
Future Volume (vph)	20	1000	17	32	1278	64	53	153	61	106	167	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Lane Util. Factor	1.00	*0.80	1.00	1.00	*0.80	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	4476	1328	1825	4520	1633	1825	1818		1825	1794	
Flt Permitted	0.13	1.00	1.00	0.24	1.00	1.00	0.62	1.00		0.26	1.00	
Satd. Flow (perm)	247	4476	1328	457	4520	1633	1188	1818		507	1794	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	1000	17	32	1278	64	53	153	61	106	167	57
RTOR Reduction (vph)	0	0	6	0	0	26	0	11	0	0	10	0
Lane Group Flow (vph)	20	1000	11	32	1278	38	53	203	0	106	214	0
Heavy Vehicles (%)	0%	3%	23%	0%	2%	0%	0%	0%	4%	0%	4%	0%
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2			6			8		7	4	
Permitted Phases	2		2	6		6	8			4		
Actuated Green, G (s)	91.8	91.8	91.8	83.5	83.5	83.5	21.2	21.2		35.7	35.7	
Effective Green, g (s)	91.8	91.8	91.8	83.5	83.5	83.5	21.2	21.2		35.7	35.7	
Actuated g/C Ratio	0.66	0.66	0.66	0.60	0.60	0.60	0.15	0.15		0.26	0.26	
Clearance Time (s)	4.5	6.8	6.8	6.8	6.8	6.8	5.7	5.7		4.5	5.7	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	2934	870	272	2695	973	179	275		223	457	
v/s Ratio Prot	0.00	c0.22			c0.28			c0.11		0.03	c0.12	
v/s Ratio Perm	0.06		0.01	0.07		0.02	0.04			0.09		
v/c Ratio	0.10	0.34	0.01	0.12	0.47	0.04	0.30	0.74		0.48	0.47	
Uniform Delay, d1	10.1	10.7	8.4	12.3	15.9	11.7	52.8	56.7		42.1	44.1	
Progression Factor	0.52	0.40	1.00	1.00	1.00	1.00	0.81	0.79		0.82	0.85	
Incremental Delay, d2	0.2	0.3	0.0	0.9	0.6	0.1	0.9	9.7		1.6	0.8	
Delay (s)	5.5	4.5	8.4	13.1	16.5	11.7	43.8	54.5		36.3	38.2	
Level of Service	A	A	A	B	B	B	D	D		D	D	
Approach Delay (s/veh)		4.6			16.2			52.4			37.6	
Approach LOS		A			B			D			D	

Intersection Summary

HCM 2000 Control Delay (s/veh)	17.8	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.53				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		21.5	
Intersection Capacity Utilization	66.8%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

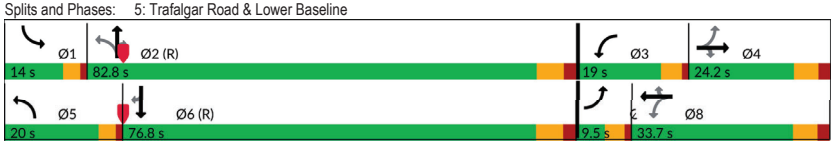
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
Future Volume (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Storage Lanes	1		1	1		1	1		1	2		1
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1755	3579	1570	1807	3614	1585	1745	4378	1581	3319	4295	1551
Flt Permitted	0.333			0.216			0.055			0.950		
Satd. Flow (perm)	615	3579	1570	411	3614	1585	101	4378	1581	3319	4295	1551
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			161			149			210			157
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1317.1			1434.4			913.5			3086.5	
Travel Time (s)		79.0			86.1			54.8			185.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Adj. Flow (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
Shared Lane Traffic (%)												
Lane Group Flow (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			6.6			6.6	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	2.0	10.0	6.1	6.1	10.0	2.0	2.0	10.0	2.0	2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	6.1	6.1	0.6	2.0	2.0	0.6	2.0	2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	7.0	10.0	10.0	7.0	25.0	25.0	7.0	25.0	25.0
Minimum Split (s)	9.5	24.2	24.2	11.5	24.2	24.2	11.5	31.6	31.6	11.0	31.6	31.6
Total Split (s)	9.5	24.2	24.2	19.0	33.7	33.7	20.0	82.8	82.8	14.0	76.8	76.8
Total Split (%)	6.8%	17.3%	17.3%	13.6%	24.1%	24.1%	14.3%	59.1%	59.1%	10.0%	54.9%	54.9%
Maximum Green (s)	5.0	18.0	18.0	14.5	27.5	27.5	16.0	76.2	76.2	10.0	70.2	70.2
Yellow Time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0	-1.0	-2.0	-2.0
Total Lost Time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	26.6	19.9	19.9	39.6	31.3	31.3	93.9	78.2	78.2	11.1	72.2	72.2
Actuated g/C Ratio	0.19	0.14	0.14	0.28	0.22	0.22	0.67	0.56	0.56	0.08	0.52	0.52
v/c Ratio	0.44	0.73	0.17	1.23	0.66	0.95	1.16	1.08	0.40	1.23	1.04	0.12
Control Delay (s/veh)	48.1	66.7	1.0	181.3	70.4	78.7	142.4	75.7	8.7	150.5	61.5	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.1	66.7	1.0	181.3	70.4	78.7	142.4	75.7	8.7	150.5	61.5	5.7
LOS	D	E	A	F	E	E	F	E	A	F	E	A
Approach Delay (s/veh)		56.1			101.4			74.1			70.0	
Approach LOS		E			F			E			E	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.23		
Intersection Signal Delay (s/veh): 76.0	Intersection LOS: E	
Intersection Capacity Utilization 104.5%	ICU Level of Service G	
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 5: Trafalgar Road & Lower Baseline



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
v/c Ratio	0.44	0.73	0.17	1.23	0.66	0.95	1.16	1.08	0.40	1.23	1.04	0.12
Control Delay (s/veh)	48.1	66.7	1.0	181.3	70.4	78.7	142.4	75.7	8.7	150.5	61.5	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	48.1	66.7	1.0	181.3	70.4	78.7	142.4	75.7	8.7	150.5	61.5	5.7
Queue Length 50th (m)	15.7	53.2	0.0	~96.2	67.1	80.0	~85.3	~349.1	24.7	~59.3	~291.7	2.9
Queue Length 95th (m)	28.9	71.2	0.0	#157.8	101.3	#174.6	#144.1	#378.7	46.2	m#49.1	m150.4	m2.5
Internal Link Dist (m)		1293.1			1410.4			889.5			3062.5	
Turn Bay Length (m)	90.0		70.0	120.0		70.0	100.0		70.0	170.0		70.0
Base Capacity (vph)	166	511	362	271	808	470	268	2445	975	262	2214	875
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.73	0.17	1.23	0.66	0.95	1.16	1.08	0.40	1.23	1.04	0.12

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
Future Volume (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	3.5	4.2	4.2	3.5	4.2	4.2	3.0	4.6	4.6	3.0	4.6	4.6
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	*0.80	1.00	0.97	*0.80	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1755	3579	1570	1807	3614	1585	1745	4378	1581	3319	4295	1551
Flt Permitted	0.33	1.00	1.00	0.22	1.00	1.00	0.05	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	616	3579	1570	412	3614	1585	100	4378	1581	3319	4295	1551
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	73	371	61	332	531	447	310	2647	389	323	2312	102
RTOR Reduction (vph)	0	0	52	0	0	116	0	0	94	0	0	50
Lane Group Flow (vph)	73	371	9	332	531	331	310	2647	295	323	2312	52
Heavy Vehicles (%)	4%	2%	4%	1%	1%	3%	0%	3%	1%	2%	5%	3%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2			6
Actuated Green, G (s)	22.8	18.8	18.8	37.8	29.3	29.3	89.4	75.3	75.3	10.1	69.3	69.3
Effective Green, g (s)	24.8	20.8	20.8	38.8	31.3	31.3	90.4	77.3	77.3	11.1	71.3	71.3
Actuated g/C Ratio	0.18	0.15	0.15	0.28	0.22	0.22	0.65	0.55	0.55	0.08	0.51	0.51
Clearance Time (s)	4.5	6.2	6.2	4.5	6.2	6.2	4.0	6.6	6.6	4.0	6.6	6.6
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0	3.0	5.0	5.0
Lane Grp Cap (vph)	149	531	233	268	807	354	265	2417	872	263	2187	789
v/s Ratio Prot	0.02	0.10		c0.14	0.15		c0.14	0.60		c0.10	0.54	
v/s Ratio Perm	0.07		0.01	c0.21		0.21	c0.61		0.19			0.03
v/c Ratio	0.49	0.70	0.04	1.24	0.66	0.94	1.17	1.10	0.34	1.23	1.06	0.07
Uniform Delay, d1	49.6	56.6	51.0	45.6	49.5	53.4	49.5	31.4	17.3	64.5	34.4	17.4
Progression Factor	1.00	1.00	1.00	1.56	1.32	1.44	1.00	1.00	1.00	0.78	1.22	15.90
Incremental Delay, d2	2.5	5.1	0.1	133.0	2.4	30.4	109.2	50.1	1.1	105.9	27.0	0.0
Delay (s)	52.1	61.7	51.2	204.0	67.8	107.4	158.7	81.5	18.3	156.3	69.0	277.3
Level of Service	D	E	D	F	E	F	F	F	B	F	E	F
Approach Delay (s/veh)		59.0			115.8			81.3			87.1	
Approach LOS		E			F			F			F	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	87.6	HCM 2000 Level of Service	F	
HCM 2000 Volume to Capacity ratio	1.22			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	15.3	
Intersection Capacity Utilization	104.5%	ICU Level of Service	G	
Analysis Period (min)	15			

c Critical Lane Group

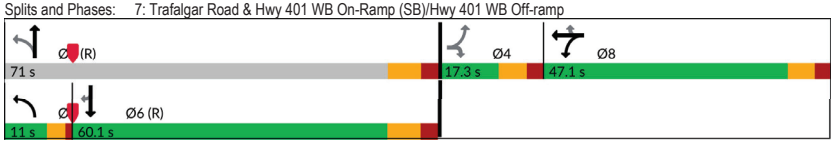
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	18	819	27	1396	8	1248	0	0	1110	45
Future Volume (vph)	17	0	18	819	27	1396	8	1248	0	0	1110	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		10.0	90.0		80.0	60.0		0.0	0.0		85.0
Storage Lanes	1		1	1		1	1		0	0		1
Taper Length (m)	2.5			60.0			95.0			2.5		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	0.88	1.00	*0.80	1.00	1.00	*0.80	1.00
Frt			0.850			0.850						0.850
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1825	0	1633	3372	1921	2737	1825	4309	0	0	4350	1306
Flt Permitted	0.656			0.950			0.088					
Satd. Flow (perm)	1260	0	1633	3372	1921	2737	169	4309	0	0	4350	1306
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			250						124
Link Speed (k/h)		30			60			60			70	
Link Distance (m)		582.9			408.0			235.1			254.2	
Travel Time (s)		69.9			24.5			14.1			13.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Adj. Flow (vph)	17	0	18	819	27	1396	8	1248	0	0	1110	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	18	819	27	1396	8	1248	0	0	1110	45
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2			2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0			10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Position(m)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Size(m)	2.0		2.0	2.0	0.6	2.0	2.0	0.6			0.6	2.0
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(m)					9.4			9.4			9.4	
Detector 2 Size(m)					0.6			0.6			0.6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4			8	2					6
Detector Phase	4		4	8	8	8	5	2			6	6
Switch Phase												
Minimum Initial (s)	10.0		10.0	10.0	10.0	10.0	7.0	20.0			20.0	20.0
Minimum Split (s)	17.3		17.3	45.1	45.1	45.1	11.0	43.1			43.1	43.1
Total Split (s)	17.3		17.3	47.1	47.1	47.1	11.0	71.0			60.1	60.1
Total Split (%)	12.8%		12.8%	34.8%	34.8%	34.8%	8.1%	52.4%			44.4%	44.4%
Maximum Green (s)	10.0		10.0	40.0	40.0	40.0	7.0	62.9			52.0	52.0
Yellow Time (s)	4.5		4.5	4.5	4.5	4.5	3.0	5.4			5.4	5.4
All-Red Time (s)	2.8		2.8	2.6	2.6	2.6	1.0	2.7			2.7	2.7
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Recall Mode	None		None	None	None	None	None	C-Min			C-Min	C-Min
Walk Time (s)	7.0		7.0	7.0	7.0	7.0		7.0			7.0	7.0
Flash Don't Walk (s)	31.0		31.0	31.0	31.0	31.0		28.0			28.0	28.0
Pedestrian Calls (#/hr)	0		0	0	0	0		0			0	0
Act Effct Green (s)	10.1		10.1	57.7	57.7	57.7	56.2	52.1			49.9	49.9
Actuated g/C Ratio	0.07		0.07	0.43	0.43	0.43	0.41	0.38			0.37	0.37
v/c Ratio	0.18		0.07	0.57	0.03	1.07	0.05	0.75			0.69	0.08
Control Delay (s/veh)	63.6		0.6	34.5	29.6	76.0	20.8	38.9			38.7	0.3
Queue Delay	0.0		0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
Total Delay (s/veh)	63.6		0.6	34.5	29.6	76.0	20.8	38.9			38.7	0.3
LOS	E		A	C	C	E	C	D			D	A
Approach Delay (s/veh)		31.2			60.3			38.8			37.2	
Approach LOS		C			E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135.5			
Actuated Cycle Length: 135.5			
Offset: 11 (8%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay (s/veh): 48.6		Intersection LOS: D	
Intersection Capacity Utilization 92.3%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 7: Trafalgar Road & Hwy 401 WB On-Ramp (SB)/Hwy 401 WB Off-ramp



Lane Group	EBL	EBR	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	17	18	819	27	1396	8	1248	1110	45
v/c Ratio	0.18	0.07	0.57	0.03	1.07	0.05	0.75	0.69	0.08
Control Delay (s/veh)	63.6	0.6	34.5	29.6	76.0	20.8	38.9	38.7	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	63.6	0.6	34.5	29.6	76.0	20.8	38.9	38.7	0.3
Queue Length 50th (m)	4.4	0.0	95.2	4.5	~236.3	1.3	127.7	107.5	0.0
Queue Length 95th (m)	12.3	0.0	135.2	12.5	#317.6	3.9	128.0	126.4	0.0
Internal Link Dist (m)				384.0			211.1	230.2	
Turn Bay Length (m)		10.0	90.0		80.0	60.0			85.0
Base Capacity (vph)	93	242	1435	817	1308	155	2003	1682	581
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.07	0.57	0.03	1.07	0.05	0.62	0.66	0.08

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	0	18	819	27	1396	8	1248	0	0	1110	45
Future Volume (vph)	17	0	18	819	27	1396	8	1248	0	0	1110	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Lane Util. Factor	1.00		1.00	0.97	1.00	0.88	1.00	*0.80			*0.80	1.00
Frt	1.00		0.85	1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00	0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)	1825		1633	3372	1921	2737	1825	4309			4350	1306
Flt Permitted	0.66		1.00	0.95	1.00	1.00	0.09	1.00			1.00	1.00
Satd. Flow (perm)	1260		1633	3372	1921	2737	169	4309			4350	1306
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	17	0	18	819	27	1396	8	1248	0	0	1110	45
RTOR Reduction (vph)	0	0	17	0	0	144	0	0	0	0	0	30
Lane Group Flow (vph)	17	0	1	819	27	1252	8	1248	0	0	1110	15
Heavy Vehicles (%)	0%	2%	0%	5%	0%	5%	0%	7%	2%	2%	6%	25%
Turn Type	Perm		Perm	Split	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases				8	8		5	2			6	
Permitted Phases	4		4			8	2					6
Actuated Green, G (s)	6.1		6.1	57.7	57.7	57.7	49.2	49.2			43.8	43.8
Effective Green, g (s)	6.1		6.1	57.7	57.7	57.7	49.2	49.2			43.8	43.8
Actuated g/C Ratio	0.05		0.05	0.43	0.43	0.43	0.36	0.36			0.32	0.32
Clearance Time (s)	7.3		7.3	7.1	7.1	7.1	4.0	8.1			8.1	8.1
Vehicle Extension (s)	3.0		3.0	2.0	2.0	2.0	2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	56		73	1435	818	1165	78	1564			1406	422
v/s Ratio Prot				0.24	0.01		0.00	c0.29			0.26	
v/s Ratio Perm	c0.01		0.00			c0.46	0.04					0.01
v/c Ratio	0.30		0.01	0.57	0.03	1.08	0.10	0.80			0.79	0.03
Uniform Delay, d1	62.6		61.8	29.5	22.7	38.9	30.5	38.7			41.7	31.4
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	3.1		0.1	0.3	0.0	49.0	0.2	4.3			4.6	0.2
Delay (s)	65.7		61.9	29.8	22.7	87.9	30.7	43.0			46.2	31.5
Level of Service	E		E	C	C	F	C	D			D	C
Approach Delay (s/veh)		63.7			65.9			43.0			45.7	
Approach LOS		E			E			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	54.8	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.95				
Actuated Cycle Length (s)	135.5	Sum of lost time (s)	26.5		
Intersection Capacity Utilization	92.3%	ICU Level of Service	F		
Analysis Period (min)	15				
c Critical Lane Group					

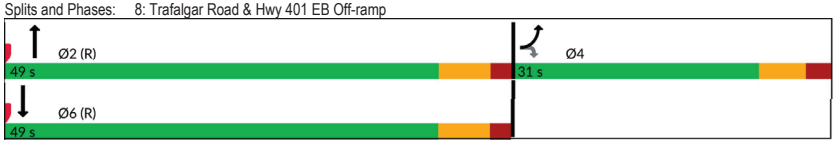
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	684	0	1744	1487	0
Future Volume (vph)	147	684	0	1744	1487	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0	125.0	0.0			0.0
Storage Lanes	2	1	0			0
Taper Length (m)	2.5		2.5			
Lane Util. Factor	0.97	0.91	1.00	*0.80	*0.80	1.00
Frt	0.895	0.850				
Flt Protected	0.985					
Satd. Flow (prot)	2934	1327	0	4309	4350	0
Flt Permitted	0.985					
Satd. Flow (perm)	2934	1327	0	4309	4350	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	23	23				
Link Speed (k/h)	60			60	70	
Link Distance (m)	531.7			76.4	204.2	
Travel Time (s)	31.9			4.6	10.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Adj. Flow (vph)	147	684	0	1744	1487	0
Shared Lane Traffic (%)		50%				
Lane Group Flow (vph)	489	342	0	1744	1487	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	7.4			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Number of Detectors	1	1		2	2	
Detector Template	Left	Right		Thru	Thru	
Leading Detector (m)	2.0	2.0		10.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	2.0		0.6	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	
Detector 2 Position(m)				9.4	9.4	
Detector 2 Size(m)				0.6	0.6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Permitted Phases		4				
Detector Phase	4	4		2	6	
Switch Phase						
Minimum Initial (s)	10.0	10.0		20.0	20.0	
Minimum Split (s)	17.0	17.0		27.0	37.0	
Total Split (s)	31.0	31.0		49.0	49.0	
Total Split (%)	38.8%	38.8%		61.3%	61.3%	
Maximum Green (s)	24.0	24.0		42.0	42.0	
Yellow Time (s)	4.5	4.5		5.0	5.0	
All-Red Time (s)	2.5	2.5		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	7.0	7.0		7.0	7.0	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Recall Mode	None	None		C-Min	C-Min	
Walk Time (s)					7.0	
Flash Don't Walk (s)					23.0	
Pedestrian Calls (#/hr)					0	
Act Effct Green (s)	22.4	22.4		43.6	43.6	
Actuated g/C Ratio	0.28	0.28		0.55	0.55	
v/c Ratio	0.58	0.88		0.74	0.63	
Control Delay (s/veh)	26.3	50.9		16.9	14.5	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay (s/veh)	26.3	50.9		16.9	14.5	
LOS	C	D		B	B	
Approach Delay (s/veh)	36.5			16.9	14.5	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 80			
Actuated Cycle Length: 80			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay (s/veh): 20.0		Intersection LOS: B	
Intersection Capacity Utilization 68.6%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 8: Trafalgar Road & Hwy 401 EB Off-ramp



Lane Group	EBL	EBR	NBT	SBT
Lane Group Flow (vph)	489	342	1744	1487
v/c Ratio	0.58	0.88	0.74	0.63
Control Delay (s/veh)	26.3	50.9	16.9	14.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.3	50.9	16.9	14.5
Queue Length 50th (m)	32.4	53.0	90.0	68.7
Queue Length 95th (m)	48.8	#107.3	109.4	84.0
Internal Link Dist (m)	507.7		52.4	180.2
Turn Bay Length (m)		125.0		
Base Capacity (vph)	903	417	2360	2382
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.54	0.82	0.74	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	147	684	0	1744	1487	0
Future Volume (vph)	147	684	0	1744	1487	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	
Lane Util. Factor	0.97	0.91		*0.80	*0.80	
Frt	0.90	0.85		1.00	1.00	
Flt Protected	0.99	1.00		1.00	1.00	
Satd. Flow (prot)	2934	1327		4309	4350	
Flt Permitted	0.99	1.00		1.00	1.00	
Satd. Flow (perm)	2934	1327		4309	4350	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	147	684	0	1744	1487	0
RTOR Reduction (vph)	17	17	0	0	0	0
Lane Group Flow (vph)	472	325	0	1744	1487	0
Heavy Vehicles (%)	12%	12%	2%	7%	6%	2%
Turn Type	Prot	Perm		NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4				
Actuated Green, G (s)	22.4	22.4		43.6	43.6	
Effective Green, g (s)	22.4	22.4		43.6	43.6	
Actuated g/C Ratio	0.28	0.28		0.55	0.55	
Clearance Time (s)	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	821	371		2348	2370	
v/s Ratio Prot	0.16			c0.40	0.34	
v/s Ratio Perm		c0.25				
v/c Ratio	0.58	0.88		0.74	0.63	
Uniform Delay, d1	24.7	27.5		13.9	12.6	
Progression Factor	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	20.1		2.2	1.3	
Delay (s)	25.7	47.6		16.1	13.9	
Level of Service	C	D		B	B	
Approach Delay (s/veh)	34.7			16.1	13.9	
Approach LOS	C			B	B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

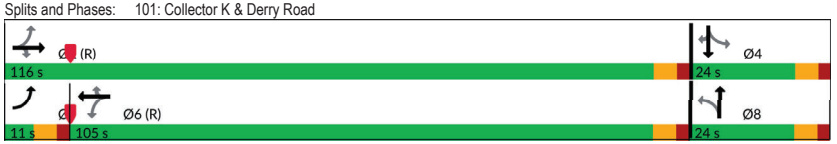
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	1406	221	21	3306	11	152	0	6	26	0	8
Future Volume (vph)	58	1406	221	21	3306	11	152	0	6	26	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	100.0		50.0	50.0		50.0	100.0		0.0	30.0		30.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	50.0			50.0			20.0			20.0		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850		0.850				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601	0	1789	1883	1601
Flt Permitted	0.038			0.179			0.757			0.754		
Satd. Flow (perm)	72	5142	1601	337	5142	1601	1426	1601	0	1420	1883	1601
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221			70		102				70
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		1054.4			259.0			344.0			149.6	
Travel Time (s)		47.4			11.7			24.8			10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	58	1406	221	21	3306	11	152	0	6	26	0	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	58	1406	221	21	3306	11	152	6	0	26	0	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0	2.0	2.0	10.0		2.0	10.0	2.0
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6	2.0	2.0	0.6		2.0	0.6	2.0
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	5.0	20.0	20.0	20.0	20.0	20.0	5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	11.0	26.0	26.0	26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	11.0	116.0	116.0	105.0	105.0	105.0	24.0	24.0		24.0	24.0	24.0
Total Split (%)	7.9%	82.9%	82.9%	75.0%	75.0%	75.0%	17.1%	17.1%		17.1%	17.1%	17.1%
Maximum Green (s)	5.0	110.0	110.0	99.0	99.0	99.0	18.0	18.0		18.0	18.0	18.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	C-Min	None	None		Max	Max	Max
Walk Time (s)		7.0	7.0	7.0	7.0	7.0	7.0	7.0		7.0	7.0	7.0
Flash Don't Walk (s)		11.0	11.0	11.0	11.0	11.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0	0	0	0	0	0		0	0	0
Act Effct Green (s)	107.9	107.9	107.9	99.1	99.1	99.1	20.1	20.1		20.1		20.1
Actuated g/C Ratio	0.77	0.77	0.77	0.71	0.71	0.71	0.14	0.14		0.14		0.14
v/c Ratio	0.50	0.35	0.17	0.09	0.91	0.01	0.74	0.02		0.13		0.03
Control Delay (s/veh)	27.3	5.3	0.7	3.4	10.2	0.0	80.1	0.2		56.1		0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	27.3	5.3	0.7	3.4	10.2	0.0	80.1	0.2		56.1		0.1
LOS	C	A	A	A	B	A	F	A		E		A
Approach Delay (s/veh)		5.4			10.1			77.1			42.9	
Approach LOS		A			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay (s/veh): 10.8		Intersection LOS: B	
Intersection Capacity Utilization 91.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 101: Collector K & Derry Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	58	1406	221	21	3306	11	152	6	26	8
v/c Ratio	0.50	0.35	0.17	0.09	0.91	0.01	0.74	0.02	0.13	0.03
Control Delay (s/veh)	27.3	5.3	0.7	3.4	10.2	0.0	80.1	0.2	56.1	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.3	5.3	0.7	3.4	10.2	0.0	80.1	0.2	56.1	0.1
Queue Length 50th (m)	3.1	36.5	0.0	0.9	55.4	0.0	42.3	0.0	6.6	0.0
Queue Length 95th (m)	15.2	41.7	4.9	m0.9	m50.6	m0.0	#80.7	0.0	16.1	0.0
Internal Link Dist (m)		1030.4			235.0			320.0		
Turn Bay Length (m)	100.0		50.0	50.0		50.0	100.0		30.0	30.0
Base Capacity (vph)	116	4040	1305	238	3638	1153	205	317	204	289
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.35	0.17	0.09	0.91	0.01	0.74	0.02	0.13	0.03

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	1406	221	21	3306	11	152	0	6	26	0	8
Future Volume (vph)	58	1406	221	21	3306	11	152	0	6	26	0	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85		1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95		1.00
Satd. Flow (prot)	1789	5142	1601	1789	5142	1601	1789	1601		1789		1601
Flt Permitted	0.04	1.00	1.00	0.18	1.00	1.00	0.76	1.00		0.75		1.00
Satd. Flow (perm)	73	5142	1601	337	5142	1601	1426	1601		1420		1601
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	58	1406	221	21	3306	11	152	0	6	26	0	8
RTOR Reduction (vph)	0	0	51	0	0	3	0	5	0	0	0	7
Lane Group Flow (vph)	58	1406	170	21	3306	8	152	1	0	26	0	1
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA		Perm		Perm
Protected Phases	5	2			6			8			4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	107.9	107.9	107.9	97.9	97.9	97.9	20.1	20.1		20.1		20.1
Effective Green, g (s)	107.9	107.9	107.9	97.9	97.9	97.9	20.1	20.1		20.1		20.1
Actuated g/C Ratio	0.77	0.77	0.77	0.70	0.70	0.70	0.14	0.14		0.14		0.14
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0		6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0
Lane Grp Cap (vph)	105	3963	1233	235	3595	1119	204	229		203		229
v/s Ratio Prot	0.02	c0.27			c0.64			0.00				
v/s Ratio Perm	0.41		0.11	0.06		0.00	c0.11			0.02		0.00
v/c Ratio	0.55	0.35	0.14	0.09	0.92	0.01	0.75	0.00		0.13		0.01
Uniform Delay, d1	34.7	5.1	4.1	6.8	17.7	6.4	57.5	51.4		52.3		51.4
Progression Factor	1.00	1.00	1.00	0.48	0.52	1.00	1.00	1.00		1.00		1.00
Incremental Delay, d2	6.2	0.2	0.2	0.2	1.3	0.0	13.7	0.0		1.3		0.0
Delay (s)	40.8	5.3	4.4	3.4	10.5	6.4	71.2	51.4		53.6		51.4
Level of Service	D	A	A	A	B	A	E	D		D		D
Approach Delay (s/veh)		6.4			10.5			70.5			53.1	
Approach LOS		A			B			E			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	11.3	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.88				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		18.0	
Intersection Capacity Utilization	91.5%	ICU Level of Service		F	
Analysis Period (min)	15				

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1430	223	0	2640	12	0	0	92	0	0	65
Future Volume (vph)	0	1430	223	0	2640	12	0	0	92	0	0	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		50.0	0.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	0		1	0		0	0		1	0		1
Taper Length (m)	2.5			2.5			2.5			2.5		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.865			0.865
Flt Protected												
Satd. Flow (prot)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Flt Permitted												
Satd. Flow (perm)	0	5142	1601	0	5137	0	0	0	1629	0	0	1629
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		212.0			359.6			356.3			336.6	
Travel Time (s)		9.5			16.2			25.7			24.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1430	223	0	2640	12	0	0	92	0	0	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1430	223	0	2652	0	0	0	92	0	0	65
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		7.4			7.4			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1430	223	0	2640	12	0	0	92	0	0	65
Future Volume (Veh/h)	0	1430	223	0	2640	12	0	0	92	0	0	65
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1430	223	0	2640	12	0	0	92	0	0	65
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		212			360							
pX, platoon unblocked	0.63			0.85			0.71	0.71	0.85	0.71	0.71	0.63
vC, conflicting volume	2652			1653			2375	4082	477	3215	4299	886
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1567			1134			22	2436	0	1209	2743	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	90	100	100	90
cM capacity (veh/h)	263			518			632	22	917	88	14	683

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	477	477	477	223	1056	1056	540	92	65
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	223	0	0	12	92	65
cSH	1700	1700	1700	1700	1700	1700	1700	917	683
Volume to Capacity	0.28	0.28	0.28	0.13	0.62	0.62	0.32	0.10	0.10
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.4
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.4	10.8
Lane LOS								A	B
Approach Delay (s/veh)	0.0				0.0			9.4	10.8
Approach LOS								A	B

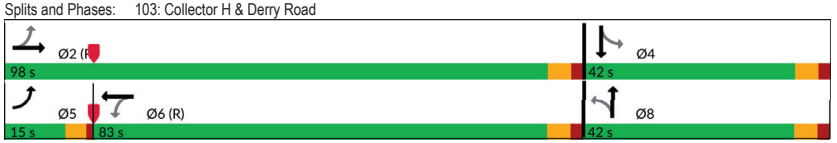
Intersection Summary					
Average Delay	0.4				
Intersection Capacity Utilization	62.0%	ICU Level of Service		B	
Analysis Period (min)	15				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1350	129	29	2570	14	108	0	14	31	22	60
Future Volume (vph)	80	1350	129	29	2570	14	108	0	14	31	22	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		0.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.999			0.985			0.928	
Flt Protected	0.950			0.950				0.958			0.986	
Satd. Flow (prot)	1789	4461	0	1789	4516	0	0	1777	0	0	1723	0
Flt Permitted	0.038			0.133				0.538			0.924	
Satd. Flow (perm)	72	4461	0	250	4516	0	0	998	0	0	1615	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			1			58			39	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		359.6			443.2			364.0			369.5	
Travel Time (s)		16.2			19.9			26.2			26.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	80	1350	129	29	2570	14	108	0	14	31	22	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	80	1479	0	29	2584	0	0	122	0	0	113	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	5.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	9.5	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	15.0	98.0		83.0	83.0		42.0	42.0		42.0	42.0	
Total Split (%)	10.7%	70.0%		59.3%	59.3%		30.0%	30.0%		30.0%	30.0%	
Maximum Green (s)	10.5	92.0		77.0	77.0		36.0	36.0		36.0	36.0	
Yellow Time (s)	3.5	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)		9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	115.1	113.6		101.7	101.7			14.4			14.4	
Actuated g/C Ratio	0.82	0.81		0.73	0.73			0.10			0.10	
v/c Ratio	0.53	0.41		0.16	0.79			0.79			0.56	
Control Delay (s/veh)	36.3	6.0		11.1	13.6			65.0			47.4	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	36.3	6.0		11.1	13.6			65.0			47.4	
LOS	D	A		B	B			E			D	
Approach Delay (s/veh)		7.6			13.6			65.0			47.4	
Approach LOS		A			B			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay (s/veh): 13.7		Intersection LOS: B	
Intersection Capacity Utilization 81.7%		ICU Level of Service D	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 103: Collector H & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	80	1479	29	2584	122	113
v/c Ratio	0.53	0.41	0.16	0.79	0.79	0.56
Control Delay (s/veh)	36.3	6.0	11.1	13.6	65.0	47.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.3	6.0	11.1	13.6	65.0	47.4
Queue Length 50th (m)	13.3	46.2	3.5	162.6	18.1	20.4
Queue Length 95th (m)	m22.5	m56.5	m4.0	136.8	39.4	m38.2
Internal Link Dist (m)		335.6		419.2	340.0	345.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	189	3624	181	3280	299	444
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.42	0.41	0.16	0.79	0.41	0.25

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1350	129	29	2570	14	108	0	14	31	22	60
Future Volume (vph)	80	1350	129	29	2570	14	108	0	14	31	22	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.98			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4461		1789	4517			1776			1725	
Flt Permitted	0.04	1.00		0.13	1.00			0.54			0.92	
Satd. Flow (perm)	71	4461		251	4517			998			1616	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	80	1350	129	29	2570	14	108	0	14	31	22	60
RTOR Reduction (vph)	0	4	0	0	0	0	0	52	0	0	35	0
Lane Group Flow (vph)	80	1475	0	29	2584	0	0	70	0	0	78	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	113.6	113.6		101.7	101.7			14.4			14.4	
Effective Green, g (s)	113.6	113.6		101.7	101.7			14.4			14.4	
Actuated g/C Ratio	0.81	0.81		0.73	0.73			0.10			0.10	
Clearance Time (s)	4.5	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	148	3619		182	3281			102			166	
v/s Ratio Prot	c0.03	0.33			c0.57							
v/s Ratio Perm	0.41			0.12				c0.07			0.05	
v/c Ratio	0.54	0.41		0.16	0.79			0.69			0.47	
Uniform Delay, d1	28.2	3.7		5.9	12.2			60.6			59.2	
Progression Factor	1.40	1.44		1.17	0.89			1.00			0.96	
Incremental Delay, d2	3.1	0.3		1.3	1.3			17.4			2.1	
Delay (s)	42.5	5.6		8.2	12.3			78.0			59.0	
Level of Service	D	A		A	B			E			E	
Approach Delay (s/veh)		7.5			12.2			78.0			59.0	
Approach LOS		A			B			E			E	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	13.6	HCM 2000 Level of Service		B	
HCM 2000 Volume to Capacity ratio	0.76				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		16.5	
Intersection Capacity Utilization	81.7%	ICU Level of Service		D	
Analysis Period (min)	15				

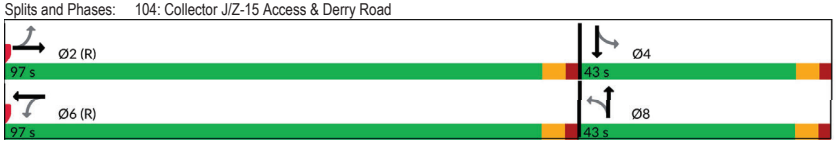
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	1327	213	18	2416	21	144	0	20	49	0	168
Future Volume (vph)	54	1327	213	18	2416	21	144	0	20	49	0	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	50.0		50.0	50.0		0.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (m)	50.0			50.0			2.5			2.5		
Lane Util. Factor	1.00	*0.80	0.91	1.00	*0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.979			0.999			0.984			0.895	
Flt Protected	0.950			0.950				0.958			0.989	
Satd. Flow (prot)	1789	4425	0	1789	4516	0	0	1775	0	0	1667	0
Flt Permitted	0.039			0.105				0.441			0.913	
Satd. Flow (perm)	73	4425	0	198	4516	0	0	817	0	0	1539	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			2			23			23	
Link Speed (k/h)		80			80			50			50	
Link Distance (m)		443.2			363.9			374.0			283.5	
Travel Time (s)		19.9			16.4			26.9			20.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	54	1327	213	18	2416	21	144	0	20	49	0	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	1540	0	18	2437	0	0	164	0	0	217	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2			2			2	
Detector Template	Left	Thru		Left	Thru			Thru			Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0			10.0			10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6			0.6			0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	26.0	26.0		26.0	26.0		40.0	40.0		40.0	40.0	
Total Split (s)	97.0	97.0		97.0	97.0		43.0	43.0		43.0	43.0	
Total Split (%)	69.3%	69.3%		69.3%	69.3%		30.7%	30.7%		30.7%	30.7%	
Maximum Green (s)	91.0	91.0		91.0	91.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0			0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Don't Walk (s)	9.0	9.0		9.0	9.0		27.0	27.0		27.0	27.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	101.8	101.8		101.8	101.8			26.2			26.2	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.19			0.19	
v/c Ratio	1.02	0.48		0.13	0.74			0.96			0.71	
Control Delay (s/veh)	162.5	5.1		16.4	17.4			105.6			58.9	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay (s/veh)	162.5	5.1		16.4	17.4			105.6			58.9	
LOS	F	A		B	B			F			E	
Approach Delay (s/veh)		10.4			17.4			105.6			58.9	
Approach LOS		B			B			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay (s/veh): 20.2		Intersection LOS: C	
Intersection Capacity Utilization 84.4%		ICU Level of Service E	
Analysis Period (min) 15			
* User Entered Value			

Splits and Phases: 104: Collector J/Z-15 Access & Derry Road



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	54	1540	18	2437	164	217
v/c Ratio	1.02	0.48	0.13	0.74	0.96	0.71
Control Delay (s/veh)	162.5	5.1	16.4	17.4	105.6	58.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	162.5	5.1	16.4	17.4	105.6	58.9
Queue Length 50th (m)	~9.9	62.6	1.3	102.7	40.3	51.7
Queue Length 95th (m)	#46.1	78.2	m4.7	246.9	#69.5	73.1
Internal Link Dist (m)		419.2		339.9	350.0	259.5
Turn Bay Length (m)	50.0		50.0			
Base Capacity (vph)	53	3226	143	3283	232	423
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.48	0.13	0.74	0.71	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	1327	213	18	2416	21	144	0	20	49	0	168
Future Volume (vph)	54	1327	213	18	2416	21	144	0	20	49	0	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Lane Util. Factor	1.00	*0.80		1.00	*0.80			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.98			0.90	
Flt Protected	0.95	1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)	1789	4426		1789	4514			1775			1668	
Flt Permitted	0.04	1.00		0.11	1.00			0.44			0.91	
Satd. Flow (perm)	74	4426		199	4514			816			1540	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	54	1327	213	18	2416	21	144	0	20	49	0	168
RTOR Reduction (vph)	0	10	0	0	1	0	0	19	0	0	19	0
Lane Group Flow (vph)	54	1530	0	18	2436	0	0	145	0	0	198	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	101.8	101.8		101.8	101.8			26.2			26.2	
Effective Green, g (s)	101.8	101.8		101.8	101.8			26.2			26.2	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.19			0.19	
Clearance Time (s)	6.0	6.0		6.0	6.0			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	53	3218		144	3282			152			288	
v/s Ratio Prot		0.35			0.54							
v/s Ratio Perm	c0.73			0.09				c0.18			0.13	
v/c Ratio	1.02	0.48		0.13	0.74			0.96			0.69	
Uniform Delay, d1	19.1	8.0		5.7	11.3			56.3			53.1	
Progression Factor	1.30	0.53		1.73	1.25			1.00			1.00	
Incremental Delay, d2	126.2	0.5		1.3	1.1			59.3			6.7	
Delay (s)	151.1	4.7		11.2	15.3			115.6			59.8	
Level of Service	F	A		B	B			F			E	
Approach Delay (s/veh)		9.6			15.3			115.6			59.8	
Approach LOS		A			B			F			E	

Intersection Summary

HCM 2000 Control Delay (s/veh)	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1430	3295	38	0	22
Future Volume (vph)	0	1430	3295	38	0	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frt				0.850		0.865
Flt Protected						
Satd. Flow (prot)	0	5142	3579	1601	0	1629
Flt Permitted						
Satd. Flow (perm)	0	5142	3579	1601	0	1629
Link Speed (k/h)		80	80		50	
Link Distance (m)		259.0	199.1		327.4	
Travel Time (s)		11.7	9.0		23.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1430	3295	38	0	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1430	3295	38	0	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		7.4	7.4		0.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	101.1%	ICU Level of Service	G
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1430	3295	38	0	22
Future Volume (Veh/h)	0	1430	3295	38	0	22
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1430	3295	38	0	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		259	199			
pX, platoon unblocked	0.66				0.70	0.66
vC, conflicting volume	3333				3772	1648
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	3504				3380	955
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	87
cM capacity (veh/h)	47				4	171

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	477	477	477	1648	1648	38	22
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	38	22
cSH	1700	1700	1700	1700	1700	1700	171
Volume to Capacity	0.28	0.28	0.28	0.97	0.97	0.02	0.13
Queue Length 95th (m)	0.0	0.0	0.0	0.0	0.0	0.0	3.3
Control Delay (s/veh)	0.0	0.0	0.0	0.0	0.0	0.0	29.1
Lane LOS							D
Approach Delay (s/veh)	0.0			0.0			29.1
Approach LOS							D

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	101.1%	ICU Level of Service		G
Analysis Period (min)	15			

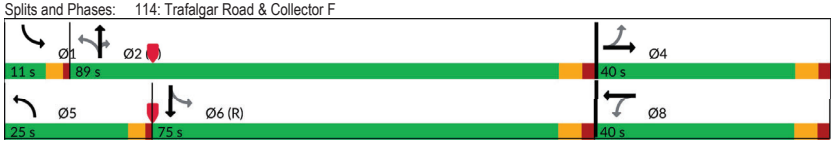
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	67	66	61	63	136	95	1688	211	188	2618	117
Future Volume (vph)	48	67	66	61	63	136	95	1688	211	188	2618	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		0.0	50.0		0.0	50.0		50.0	70.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.926			0.897				0.850		0.994	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1667	0	1652	1615	0	1711	4421	1566	1711	4394	0
Flt Permitted	0.290			0.522			0.046			0.067		
Satd. Flow (perm)	504	1667	0	908	1615	0	83	4421	1566	121	4394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		33			73				144		6	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		224.2			200.3			332.8			265.5	
Travel Time (s)		16.1			14.4			20.0			15.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	48	67	66	61	63	136	95	1688	211	188	2618	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	133	0	61	199	0	95	1688	211	188	2735	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			6.0			6.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.5	26.0	26.0	11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0	89.0	11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%	63.6%	7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0	83.0	7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	17.1	17.1		17.1	17.1		97.8	86.7	86.7	112.6	97.8	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.70	0.62	0.62	0.80	0.70	
v/c Ratio	0.79	0.57		0.55	0.76		0.58	0.62	0.21	0.58	0.89	
Control Delay (s/veh)	124.2	52.1		74.5	54.6		31.7	31.7	10.9	40.4	13.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	124.2	52.1		74.5	54.6		31.7	31.7	10.9	40.4	13.9	
LOS	F	D		E	D		C	C	B	D	B	
Approach Delay (s/veh)		71.2			59.3			29.5			15.6	
Approach LOS		E			E			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay (s/veh): 24.8		Intersection LOS: C	
Intersection Capacity Utilization 97.4%		ICU Level of Service F	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 114: Trafalgar Road & Collector F



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	48	133	61	199	95	1688	211	188	2735
v/c Ratio	0.79	0.57	0.55	0.76	0.58	0.62	0.21	0.58	0.89
Control Delay (s/veh)	124.2	52.1	74.5	54.6	31.7	31.7	10.9	40.4	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	124.2	52.1	74.5	54.6	31.7	31.7	10.9	40.4	13.9
Queue Length 50th (m)	13.4	27.0	16.2	34.4	10.6	205.5	25.4	33.6	73.5
Queue Length 95th (m)	#29.4	45.4	m29.3	59.1	m6.9	m171.9	m21.0	m45.2	#363.1
Internal Link Dist (m)		200.2		176.3		308.8			241.5
Turn Bay Length (m)	60.0		50.0		50.0		50.0	70.0	
Base Capacity (vph)	122	429	220	447	309	2739	1025	326	3072
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.31	0.28	0.45	0.31	0.62	0.21	0.58	0.89

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	67	66	61	63	136	95	1688	211	188	2618	117
Future Volume (vph)	48	67	66	61	63	136	95	1688	211	188	2618	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.93		1.00	0.90		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1667		1652	1616		1711	4421	1566	1711	4393	
Flt Permitted	0.29	1.00		0.52	1.00		0.05	1.00	1.00	0.07	1.00	
Satd. Flow (perm)	503	1667		908	1616		83	4421	1566	120	4393	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	48	67	66	61	63	136	95	1688	211	188	2618	117
RTOR Reduction (vph)	0	29	0	0	64	0	0	0	55	0	2	0
Lane Group Flow (vph)	48	104	0	61	135	0	95	1688	156	188	2733	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	17.1	17.1		17.1	17.1		95.8	86.7	86.7	110.9	97.8	
Effective Green, g (s)	17.1	17.1		17.1	17.1		95.8	86.7	86.7	110.9	97.8	
Actuated g/C Ratio	0.12	0.12		0.12	0.12		0.68	0.62	0.62	0.79	0.70	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	61	203		110	197		162	2737	969	324	3068	
v/s Ratio Prot		0.06			0.08		0.04	0.38		c0.08	c0.62	
v/s Ratio Perm	c0.10			0.07			0.36		0.10	0.38		
v/c Ratio	0.79	0.51		0.55	0.68		0.59	0.62	0.16	0.58	0.89	
Uniform Delay, d1	59.7	57.5		57.9	58.9		29.5	16.4	11.3	28.8	16.8	
Progression Factor	1.01	1.00		0.99	0.98		1.19	1.87	2.65	1.50	0.59	
Incremental Delay, d2	47.5	2.2		5.9	9.5		0.5	0.1	0.0	1.4	2.3	
Delay (s)	107.6	59.8		63.4	67.2		35.5	30.8	29.9	44.6	12.2	
Level of Service	F	E		E	E		D	C	C	D	B	
Approach Delay (s/veh)		72.5			66.3			31.0			14.3	
Approach LOS		E			E			C			B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

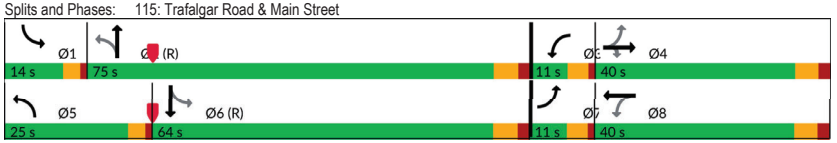
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	67	614	390	167	112	463	1760	150	120	2041	452
Future Volume (vph)	204	67	614	390	167	112	463	1760	150	120	2041	452
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	60.0		50.0	90.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt			0.850		0.940			0.988			0.973	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	3579	1601	1789	3364	0	1711	4368	0	1711	4302	0
Flt Permitted	0.522			0.711			0.065			0.069		
Satd. Flow (perm)	983	3579	1601	1339	3364	0	117	4368	0	124	4302	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			238		109			12			34	
Link Speed (k/h)		48			48			60			60	
Link Distance (m)		906.8			627.0			712.8			236.3	
Travel Time (s)		68.0			47.0			42.8			14.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	204	67	614	390	167	112	463	1760	150	120	2041	452
Shared Lane Traffic (%)												
Lane Group Flow (vph)	204	67	614	390	279	0	463	1910	0	120	2493	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2		1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0	2.0	2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6	2.0	2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4		4	8			2			6		
Detector Phase	7	4	4	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	9.5	40.0	40.0	9.5	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	11.0	40.0	40.0	11.0	40.0		25.0	75.0		14.0	64.0	
Total Split (%)	7.9%	28.6%	28.6%	7.9%	28.6%		17.9%	53.6%		10.0%	45.7%	
Maximum Green (s)	6.5	34.0	34.0	6.5	34.0		21.0	69.0		10.0	58.0	
Yellow Time (s)	3.5	4.0	4.0	3.5	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Min		None	C-Min	
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	
Flash Don't Walk (s)		27.0	27.0		27.0			11.0			11.0	
Pedestrian Calls (#/hr)		0	0		0			0			0	
Act Effct Green (s)	42.0	34.0	34.0	42.0	34.0		85.0	69.7		69.3	58.0	
Actuated g/C Ratio	0.30	0.24	0.24	0.30	0.24		0.61	0.50		0.50	0.41	
v/c Ratio	0.61	0.08	1.08	0.92	0.31		1.49	0.88		0.72	1.38	
Control Delay (s/veh)	47.5	41.3	91.2	74.3	27.0		264.3	50.2		52.9	208.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay (s/veh)	47.5	41.3	91.2	74.3	27.0		264.3	50.2		52.9	208.5	
LOS	D	D	F	E	C		F	D		D	F	
Approach Delay (s/veh)		77.4			54.5			91.9			201.3	
Approach LOS		E			D			F			F	

Intersection Summary		
Area Type:	Other	
Cycle Length: 140		
Actuated Cycle Length: 140		
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green		
Natural Cycle: 150		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 1.49		
Intersection Signal Delay (s/veh): 129.8		Intersection LOS: F
Intersection Capacity Utilization 122.9%		ICU Level of Service H
Analysis Period (min) 15		

* User Entered Value

Splits and Phases: 115: Trafalgar Road & Main Street



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	204	67	614	390	279	463	1910	120	2493
v/c Ratio	0.61	0.08	1.08	0.92	0.31	1.49	0.88	0.72	1.38
Control Delay (s/veh)	47.5	41.3	91.2	74.3	27.0	264.3	50.2	52.9	208.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	47.5	41.3	91.2	74.3	27.0	264.3	50.2	52.9	208.5
Queue Length 50th (m)	43.3	7.7	~138.6	93.7	20.2	~165.8	199.1	17.3	~387.7
Queue Length 95th (m)	65.3	14.2	#212.6	#160.5	33.1	m#229.4	m202.0	#42.8	#418.6
Internal Link Dist (m)		882.8			603.0		688.8		212.3
Turn Bay Length (m)	60.0		50.0	90.0		50.0		50.0	
Base Capacity (vph)	332	869	569	422	899	310	2181	175	1802
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.08	1.08	0.92	0.31	1.49	0.88	0.69	1.38

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	67	614	390	167	112	463	1760	150	120	2041	452
Future Volume (vph)	204	67	614	390	167	112	463	1760	150	120	2041	452
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	*0.80		1.00	*0.80	
Frt	1.00	1.00	0.85	1.00	0.94		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	3579	1601	1789	3363		1711	4369		1711	4301	
Flt Permitted	0.52	1.00	1.00	0.71	1.00		0.06	1.00		0.07	1.00	
Satd. Flow (perm)	983	3579	1601	1339	3363		116	4369		124	4301	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	204	67	614	390	167	112	463	1760	150	120	2041	452
RTOR Reduction (vph)	0	0	180	0	83	0	0	6	0	0	20	0
Lane Group Flow (vph)	204	67	434	390	196	0	463	1904	0	120	2473	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	40.5	34.0	34.0	40.5	34.0		83.0	69.7		67.3	58.0	
Effective Green, g (s)	40.5	34.0	34.0	40.5	34.0		83.0	69.7		67.3	58.0	
Actuated g/C Ratio	0.29	0.24	0.24	0.29	0.24		0.59	0.50		0.48	0.41	
Clearance Time (s)	4.5	6.0	6.0	4.5	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	321	869	388	408	816		308	2175		165	1781	
v/s Ratio Prot	0.03	0.02		c0.04	0.06		c0.23	0.44		0.05	0.58	
v/s Ratio Perm	0.15		c0.27	0.23			c0.66			0.30		
v/c Ratio	0.64	0.08	1.12	0.96	0.24		1.50	0.88		0.73	1.39	
Uniform Delay, d1	42.3	40.9	53.0	48.0	42.6		47.9	31.3		28.0	41.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.86	1.46		1.09	0.99	
Incremental Delay, d2	4.1	0.0	81.7	33.0	0.2		238.8	4.0		13.5	178.1	
Delay (s)	46.4	40.9	134.7	81.0	42.8		280.1	49.8		44.0	218.5	
Level of Service	D	D	F	F	D		F	D		D	F	
Approach Delay (s/veh)		107.2			65.0			94.8			210.5	
Approach LOS		F			E			F			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	139.6	HCM 2000 Level of Service		F	
HCM 2000 Volume to Capacity ratio	1.40				
Actuated Cycle Length (s)	140.0	Sum of lost time (s)		20.5	
Intersection Capacity Utilization	122.9%	ICU Level of Service		H	
Analysis Period (min)	15				

c Critical Lane Group

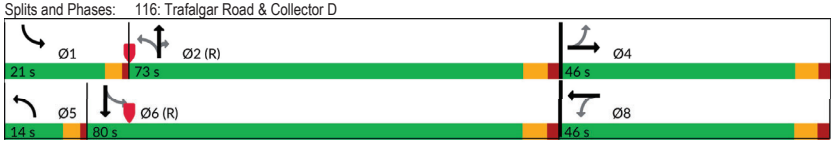
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	19	147	316	22	397	207	1587	81	179	2408	236
Future Volume (vph)	117	19	147	316	22	397	207	1587	81	179	2408	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	80.0		0.0	50.0		50.0	100.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	50.0			50.0			50.0			70.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	1.00	1.00	*0.80	0.91
Frt		0.867			0.858				0.850		0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1652	1561	0	1652	1545	0	1711	4421	1566	1711	4363	0
Flt Permitted	0.203			0.584			0.057			0.056		
Satd. Flow (perm)	353	1561	0	1015	1545	0	103	4421	1566	101	4363	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		138			187				86		15	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		108.9			355.4			224.5			712.8	
Travel Time (s)		7.8			25.6			13.5			42.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	117	19	147	316	22	397	207	1587	81	179	2408	236
Shared Lane Traffic (%)												
Lane Group Flow (vph)	117	166	0	316	419	0	207	1587	81	179	2644	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0	2.0	2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6	2.0	2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2		2	6		
Detector Phase	4	4		8	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	20.0	20.0	7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0	26.0	11.0	26.0	
Total Split (s)	46.0	46.0		46.0	46.0		14.0	73.0	73.0	21.0	80.0	
Total Split (%)	32.9%	32.9%		32.9%	32.9%		10.0%	52.1%	52.1%	15.0%	57.1%	
Maximum Green (s)	40.0	40.0		40.0	40.0		10.0	67.0	67.0	17.0	74.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag							Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min	C-Min	None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0	7.0		7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0	0		0	
Act Effct Green (s)	40.0	40.0		40.0	40.0		81.9	69.9	69.9	88.6	74.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.59	0.50	0.50	0.63	0.53	
v/c Ratio	1.17	0.31		1.09	0.73		1.18	0.72	0.10	0.79	1.14	
Control Delay (s/veh)	186.8	10.7		125.3	32.7		169.0	8.1	1.1	34.8	101.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	186.8	10.7		125.3	32.7		169.0	8.1	1.1	34.8	101.2	
LOS	F	B		F	C		F	A	A	C	F	
Approach Delay (s/veh)		83.5			72.5			25.6			97.0	
Approach LOS		F			E			C			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.18			
Intersection Signal Delay (s/veh): 69.8		Intersection LOS: E	
Intersection Capacity Utilization 115.6%		ICU Level of Service H	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 116: Trafalgar Road & Collector D



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	117	166	316	419	207	1587	81	179	2644
v/c Ratio	1.17	0.31	1.09	0.73	1.18	0.72	0.10	0.79	1.14
Control Delay (s/veh)	186.8	10.7	125.3	32.7	169.0	8.1	1.1	34.8	101.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	186.8	10.7	125.3	32.7	169.0	8.1	1.1	34.8	101.2
Queue Length 50th (m)	~38.9	5.8	~99.8	61.0	~53.2	24.9	0.0	35.8	~355.6
Queue Length 95th (m)	#79.1	23.8	#159.4	102.1	#109.3	57.5	m1.7	m27.1	m186.5
Internal Link Dist (m)		84.9		331.4		200.5			688.8
Turn Bay Length (m)	50.0		80.0		50.0		50.0	100.0	
Base Capacity (vph)	100	544	290	575	175	2207	825	260	2313
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.31	1.09	0.73	1.18	0.72	0.10	0.69	1.14

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	19	147	316	22	397	207	1587	81	179	2408	236
Future Volume (vph)	117	19	147	316	22	397	207	1587	81	179	2408	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80	1.00	1.00	*0.80	
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1652	1561		1652	1545		1711	4421	1566	1711	4362	
Flt Permitted	0.20	1.00		0.58	1.00		0.06	1.00	1.00	0.06	1.00	
Satd. Flow (perm)	352	1561		1016	1545		103	4421	1566	100	4362	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	117	19	147	316	22	397	207	1587	81	179	2408	236
RTOR Reduction (vph)	0	99	0	0	134	0	0	0	41	0	7	0
Lane Group Flow (vph)	117	67	0	316	285	0	207	1587	40	179	2637	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	40.0	40.0		40.0	40.0		79.9	69.9	69.9	88.0	74.0	
Effective Green, g (s)	40.0	40.0		40.0	40.0		79.9	69.9	69.9	88.0	74.0	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.57	0.50	0.50	0.63	0.53	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	100	446		290	441		173	2207	781	225	2305	
v/s Ratio Prot		0.04			0.18		c0.09	0.36		c0.08	0.60	
v/s Ratio Perm	c0.33			0.31			c0.59		0.03	0.42		
v/c Ratio	1.17	0.15		1.09	0.65		1.20	0.72	0.05	0.80	1.14	
Uniform Delay, d1	50.0	37.3		50.0	43.8		45.0	27.4	18.0	39.0	33.0	
Progression Factor	1.00	1.00		1.00	1.00		1.60	0.23	0.25	0.97	1.18	
Incremental Delay, d2	142.8	0.2		78.9	3.3		125.7	1.7	0.1	1.8	65.4	
Delay (s)	192.8	37.5		128.9	47.1		197.6	8.0	4.7	39.7	104.4	
Level of Service	F	D		F	D		F	A	A	D	F	
Approach Delay (s/veh)		101.7			82.3			28.7			100.3	
Approach LOS		F			F			C			F	

Intersection Summary

HCM 2000 Control Delay (s/veh)	74.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	115.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

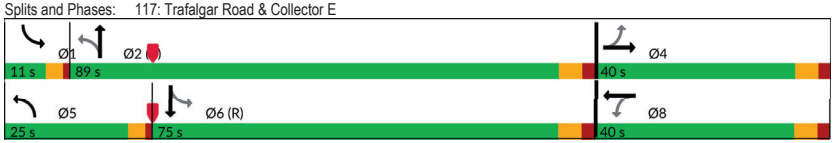
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	12	6	122	11	85	40	1783	49	72	2771	28
Future Volume (vph)	7	12	6	122	11	85	40	1783	49	72	2771	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Storage Length (m)	50.0		0.0	50.0		0.0	50.0		0.0	50.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	50.0			50.0			50.0			50.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	*0.80	0.91	1.00	*0.80	0.91
Frt		0.950			0.867			0.996			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1789	1789	0	1789	1633	0	1711	4403	0	1711	4412	0
Flt Permitted	0.659			0.746			0.040			0.065		
Satd. Flow (perm)	1241	1789	0	1405	1633	0	72	4403	0	117	4412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			85			4			1	
Link Speed (k/h)		30			30			60			60	
Link Distance (m)		233.9			196.8			265.5			224.5	
Travel Time (s)		28.1			23.6			15.9			13.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	7	12	6	122	11	85	40	1783	49	72	2771	28
Shared Lane Traffic (%)												
Lane Group Flow (vph)	7	18	0	122	96	0	40	1832	0	72	2799	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.3			3.3	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	1.04	1.01	1.01	1.04	1.01	1.01
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	2.0	10.0		2.0	10.0		2.0	10.0		2.0	10.0	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	2.0	0.6		2.0	0.6		2.0	0.6		2.0	0.6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		9.4			9.4			9.4			9.4	
Detector 2 Size(m)		0.6			0.6			0.6			0.6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		6.5	20.0		7.0	20.0	
Minimum Split (s)	40.0	40.0		40.0	40.0		11.0	26.0		11.0	26.0	
Total Split (s)	40.0	40.0		40.0	40.0		25.0	89.0		11.0	75.0	
Total Split (%)	28.6%	28.6%		28.6%	28.6%		17.9%	63.6%		7.9%	53.6%	
Maximum Green (s)	34.0	34.0		34.0	34.0		21.0	83.0		7.0	69.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	27.0	27.0		27.0	27.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)	17.5	17.5		17.5	17.5		107.9	100.5		110.8	102.0	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.77	0.72		0.79	0.73	
v/c Ratio	0.05	0.08		0.70	0.35		0.30	0.58		0.39	0.87	
Control Delay (s/veh)	51.3	37.6		78.2	16.1		28.4	2.1		15.0	11.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.5	
Total Delay (s/veh)	51.3	37.6		78.2	16.1		28.4	2.1		15.0	12.2	
LOS	D	D		E	B		C	A		B	B	
Approach Delay (s/veh)		41.4			50.8			2.7			12.2	
Approach LOS		D			D			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay (s/veh): 10.5		Intersection LOS: B	
Intersection Capacity Utilization 83.3%		ICU Level of Service E	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 117: Trafalgar Road & Collector E



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	7	18	122	96	40	1832	72	2799
v/c Ratio	0.05	0.08	0.70	0.35	0.30	0.58	0.39	0.87
Control Delay (s/veh)	51.3	37.6	78.2	16.1	28.4	2.1	15.0	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Total Delay (s/veh)	51.3	37.6	78.2	16.1	28.4	2.1	15.0	12.2
Queue Length 50th (m)	1.6	2.8	33.5	2.9	2.4	19.6	3.0	101.7
Queue Length 95th (m)	m4.3	m7.2	52.6	18.5	m8.6	23.0	m3.5	m86.4
Internal Link Dist (m)		209.9		172.8		241.5		200.5
Turn Bay Length (m)	50.0		50.0		50.0		50.0	
Base Capacity (vph)	301	439	341	460	303	3163	185	3214
Starvation Cap Reductn	0	0	0	0	0	0	0	114
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.04	0.36	0.21	0.13	0.58	0.39	0.90

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	12	6	122	11	85	40	1783	49	72	2771	28
Future Volume (vph)	7	12	6	122	11	85	40	1783	49	72	2771	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.7	3.7	3.7	3.7	3.3	3.5	3.5	3.3	3.5	3.5
Total Lost time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	*0.80		1.00	*0.80	
Frt	1.00	0.95		1.00	0.87		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1789	1789		1789	1633		1711	4403		1711	4414	
Flt Permitted	0.66	1.00		0.75	1.00		0.04	1.00		0.06	1.00	
Satd. Flow (perm)	1241	1789		1404	1633		72	4403		117	4414	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	7	12	6	122	11	85	40	1783	49	72	2771	28
RTOR Reduction (vph)	0	5	0	0	74	0	0	1	0	0	0	0
Lane Group Flow (vph)	7	13	0	122	22	0	40	1831	0	72	2799	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	17.5	17.5		17.5	17.5		105.0	99.7		108.0	101.2	
Effective Green, g (s)	17.5	17.5		17.5	17.5		105.0	99.7		108.0	101.2	
Actuated g/C Ratio	0.13	0.13		0.13	0.13		0.75	0.71		0.77	0.72	
Clearance Time (s)	6.0	6.0		6.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	155	223		175	204		116	3135		167	3190	
v/s Ratio Prot		0.01			0.01		0.01	0.42		c0.02	c0.63	
v/s Ratio Perm	0.01			c0.09			0.24			0.31		
v/c Ratio	0.05	0.06		0.70	0.11		0.34	0.58		0.43	0.88	
Uniform Delay, d1	53.9	54.0		58.7	54.3		22.7	9.9		8.0	14.7	
Progression Factor	1.01	0.96		1.00	0.97		2.59	0.14		2.82	0.68	
Incremental Delay, d2	0.1	0.1		11.4	0.2		1.4	0.6		0.2	0.4	
Delay (s)	54.5	52.1		69.9	53.1		60.1	2.0		22.8	10.3	
Level of Service	D	D		E	D		E	A		C	B	
Approach Delay (s/veh)		52.8			62.5			3.2			10.7	
Approach LOS		D			E			A			B	

Intersection Summary

HCM 2000 Control Delay (s/veh)	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	13	446	910	172	439	30
Future Volume (vph)	13	446	910	172	439	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt			0.976		0.991	
Flt Protected		0.999			0.955	
Satd. Flow (prot)	0	3418	3339	0	1704	0
Flt Permitted		0.999			0.955	
Satd. Flow (perm)	0	3418	3339	0	1704	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		230.0	906.8		1018.7	
Travel Time (s)		17.3	68.0		76.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	13	446	910	172	439	30
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	459	1082	0	469	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.3	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.5%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	13	446	910	172	439	30
Future Volume (Veh/h)	13	446	910	172	439	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	13	446	910	172	439	30
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	1082				1245	541
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1082				1245	541
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				0	94
cM capacity (veh/h)	640				163	485

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	162	297	607	475	469
Volume Left	13	0	0	0	439
Volume Right	0	0	0	172	30
cSH	640	1700	1700	1700	170
Volume to Capacity	0.02	0.17	0.36	0.28	2.76
Queue Length 95th (m)	0.5	0.0	0.0	0.0	316.2
Control Delay (s/veh)	1.1	0.0	0.0	0.0	850.2
Lane LOS	A				F
Approach Delay (s/veh)	0.4		0.0		850.2
Approach LOS					F

Intersection Summary				
Average Delay		198.5		
Intersection Capacity Utilization		63.5%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	131	206	271	0	0	398
Future Volume (vph)	131	206	271	0	0	398
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865	
Flt Protected		0.981				
Satd. Flow (prot)	0	3511	3579	0	1629	0
Flt Permitted		0.981				
Satd. Flow (perm)	0	3511	3579	0	1629	0
Link Speed (k/h)		48	48		48	
Link Distance (m)		627.0	745.9		191.7	
Travel Time (s)		47.0	55.9		14.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	131	206	271	0	0	398
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	337	271	0	398	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	131	206	271	0	0	398
Future Volume (Veh/h)	131	206	271	0	0	398
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	131	206	271	0	0	398
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	271				636	136
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	271				636	136
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	90				100	55
cM capacity (veh/h)	1289				369	888

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	200	137	181	90	398
Volume Left	131	0	0	0	0
Volume Right	0	0	0	0	398
cSH	1289	1700	1700	1700	888
Volume to Capacity	0.10	0.08	0.11	0.05	0.45
Queue Length 95th (m)	2.6	0.0	0.0	0.0	17.8
Control Delay (s/veh)	5.6	0.0	0.0	0.0	12.3
Lane LOS	A				B
Approach Delay (s/veh)	3.3		0.0		12.3
Approach LOS					B

Intersection Summary				
Average Delay		6.0		
Intersection Capacity Utilization		51.6%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	206	0	0	0	0	271
Future Volume (vph)	206	0	0	0	0	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.865
Flt Protected	0.950					
Satd. Flow (prot)	1789	1883	0	0	0	1629
Flt Permitted	0.950					
Satd. Flow (perm)	1789	1883	0	0	0	1629
Link Speed (k/h)	48			48	48	
Link Distance (m)	745.9			52.5	161.7	
Travel Time (s)	55.9			3.9	12.1	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	206	0	0	0	0	271
Shared Lane Traffic (%)						
Lane Group Flow (vph)	206	0	0	0	0	271
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	206	0	0	0	0	271
Future Volume (vph)	206	0	0	0	0	271
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	206	0	0	0	0	271

Direction, Lane #	EB 1	EB 2	SB 1
Volume Total (vph)	206	0	271
Volume Left (vph)	206	0	0
Volume Right (vph)	0	0	271
Hadj (s)	0.53	0.00	-0.57
Departure Headway (s)	5.6	5.1	4.0
Degree Utilization, x	0.32	0.00	0.30
Capacity (veh/h)	612	687	871
Control Delay (s/veh)	10.1	6.9	8.6
Approach Delay (s/veh)	10.1		8.6
Approach LOS	B		A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	20.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	66	21	0	0	0
Future Volume (vph)	0	66	21	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.950		
Satd. Flow (prot)	1629	0	0	1789	1883	0
Flt Permitted				0.950		
Satd. Flow (perm)	1629	0	0	1789	1883	0
Link Speed (k/h)	48			48	70	
Link Distance (m)	1097.2			442.1	159.1	
Travel Time (s)	82.3			33.2	8.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	66	21	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	66	0	0	21	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	14.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	66	21	0	0	0
Future Volume (Veh/h)	0	66	21	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	66	21	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	42	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	42	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	99			
cM capacity (veh/h)	957	1085	1623			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	66	21	0
Volume Left	0	21	0
Volume Right	66	0	0
cSH	1085	1623	1700
Volume to Capacity	0.06	0.01	0.00
Queue Length 95th (m)	1.5	0.3	0.0
Control Delay (s/veh)	8.5	7.2	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	7.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	8.2		
Intersection Capacity Utilization	14.1%	ICU Level of Service	A
Analysis Period (min)	15		

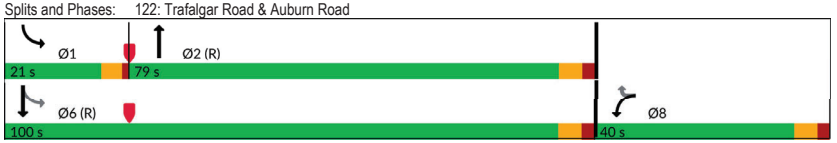
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	197	1944	70	91	2033
Future Volume (vph)	125	197	1944	70	91	2033
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.5	3.5	3.3	3.5
Storage Length (m)	40.0	0.0		0.0	80.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	50.0				50.0	
Lane Util. Factor	1.00	1.00	*0.80	0.91	1.00	*0.80
Frt		0.850	0.995			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	1601	4399	0	1711	4421
Flt Permitted	0.950				0.046	
Satd. Flow (perm)	1789	1601	4399	0	83	4421
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		197	5			
Link Speed (k/h)	48		60			60
Link Distance (m)	628.8		236.3			347.7
Travel Time (s)	47.2		14.2			20.9
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	125	197	1944	70	91	2033
Shared Lane Traffic (%)						
Lane Group Flow (vph)	125	197	2014	0	91	2033
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.3			3.3
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	1.01	1.01	1.04	1.01
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	2.0	2.0	10.0		2.0	10.0
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	2.0	2.0	0.6		2.0	0.6
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			9.4			9.4
Detector 2 Size(m)			0.6			0.6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases		8			6	
Detector Phase	8	8	2		1	6
Switch Phase						
Minimum Initial (s)	10.0	10.0	20.0		5.0	20.0
Minimum Split (s)	40.0	40.0	40.0		9.5	40.0
Total Split (s)	40.0	40.0	79.0		21.0	100.0
Total Split (%)	28.6%	28.6%	56.4%		15.0%	71.4%
Maximum Green (s)	34.0	34.0	73.0		16.5	94.0
Yellow Time (s)	4.0	4.0	4.0		3.5	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.5	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	C-Min		None	C-Min
Walk Time (s)	7.0	7.0	7.0			7.0
Flash Don't Walk (s)	9.0	9.0	27.0			27.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	15.2	15.2	99.2		114.3	112.8
Actuated g/C Ratio	0.11	0.11	0.71		0.82	0.81
v/c Ratio	0.64	0.56	0.65		0.53	0.57
Control Delay (s/veh)	74.4	13.5	8.4		28.4	6.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay (s/veh)	74.4	13.5	8.5		28.4	6.0
LOS	E	B	A		C	A
Approach Delay (s/veh)	37.1		8.5			7.0
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay (s/veh): 9.8		Intersection LOS: A	
Intersection Capacity Utilization 66.2%		ICU Level of Service C	
Analysis Period (min) 15			

* User Entered Value

Splits and Phases: 122: Trafalgar Road & Auburn Road



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	125	197	2014	91	2033
v/c Ratio	0.64	0.56	0.65	0.53	0.57
Control Delay (s/veh)	74.4	13.5	8.4	28.4	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	74.4	13.5	8.5	28.4	6.0
Queue Length 50th (m)	34.3	0.0	87.5	6.0	70.9
Queue Length 95th (m)	53.5	22.3	38.7	25.3	102.0
Internal Link Dist (m)	604.8		212.3		323.7
Turn Bay Length (m)	40.0			80.0	
Base Capacity (vph)	434	537	3119	259	3560
Starvation Cap Reductn	0	0	99	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.29	0.37	0.67	0.35	0.57

Intersection Summary

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	197	1944	70	91	2033
Future Volume (vph)	125	197	1944	70	91	2033
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	3.7	3.7	3.5	3.5	3.3	3.5
Total Lost time (s)	6.0	6.0	6.0		4.5	6.0
Lane Util. Factor	1.00	1.00	*0.80		1.00	*0.80
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1789	1601	4398		1711	4421
Flt Permitted	0.95	1.00	1.00		0.05	1.00
Satd. Flow (perm)	1789	1601	4398		83	4421
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	125	197	1944	70	91	2033
RTOR Reduction (vph)	0	176	1	0	0	0
Lane Group Flow (vph)	125	21	2013	0	91	2033
Turn Type	Prot	Perm	NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases		8			6	
Actuated Green, G (s)	15.2	15.2	99.3		112.8	112.8
Effective Green, g (s)	15.2	15.2	99.3		112.8	112.8
Actuated g/C Ratio	0.11	0.11	0.71		0.81	0.81
Clearance Time (s)	6.0	6.0	6.0		4.5	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	194	173	3119		171	3562
v/s Ratio Prot	c0.07		c0.46		0.03	c0.46
v/s Ratio Perm		0.01			0.39	
v/c Ratio	0.64	0.12	0.65		0.53	0.57
Uniform Delay, d1	59.8	56.4	10.9		19.3	4.9
Progression Factor	1.00	1.00	0.66		1.00	1.00
Incremental Delay, d2	7.1	0.3	0.6		3.2	0.7
Delay (s)	67.0	56.7	7.7		22.5	5.6
Level of Service	E	E	A		C	A
Approach Delay (s/veh)	60.7		7.7			6.3
Approach LOS	E		A			A

Intersection Summary				
HCM 2000 Control Delay (s/veh)	10.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	66.2%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	67	22	21	66	0
Future Volume (vph)	0	67	22	21	66	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.975		
Satd. Flow (prot)	1629	0	0	1836	1883	0
Flt Permitted				0.975		
Satd. Flow (perm)	1629	0	0	1836	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	747.6			161.7	442.1	
Travel Time (s)	56.1			12.1	33.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	67	22	21	66	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	0	0	43	66	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	19.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	67	22	21	66	0
Future Volume (Veh/h)	0	67	22	21	66	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	67	22	21	66	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	131	66	66			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	131	66	66			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	99			
cM capacity (veh/h)	851	998	1536			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	67	43	66
Volume Left	0	22	0
Volume Right	67	0	0
cSH	998	1536	1700
Volume to Capacity	0.07	0.01	0.04
Queue Length 95th (m)	1.6	0.3	0.0
Control Delay (s/veh)	8.9	3.8	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.9	3.8	0.0
Approach LOS	A		

Intersection Summary					
Average Delay		4.3			
Intersection Capacity Utilization		19.8%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	20	114	27	49	29	42
Future Volume (vph)	20	114	27	49	29	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.885		0.913			
Flt Protected	0.993					0.980
Satd. Flow (prot)	1582	0	1644	0	0	1765
Flt Permitted	0.993					0.980
Satd. Flow (perm)	1582	0	1644	0	0	1765
Link Speed (k/h)	50		50			50
Link Distance (m)	249.9		205.6			126.7
Travel Time (s)	18.0		14.8			9.1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	20	114	27	49	29	42
Shared Lane Traffic (%)						
Lane Group Flow (vph)	134	0	76	0	0	71
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.3		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	25.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	114	27	49	29	42
Future Volume (Veh/h)	20	114	27	49	29	42
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	20	114	27	49	29	42
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	152	52			76	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	152	52			76	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	98	89			98	
cM capacity (veh/h)	824	1016			1523	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	134	76	71
Volume Left	20	0	29
Volume Right	114	49	0
cSH	982	1700	1523
Volume to Capacity	0.14	0.04	0.02
Queue Length 95th (m)	3.6	0.0	0.4
Control Delay (s/veh)	9.2	0.0	3.1
Lane LOS	A		A
Approach Delay (s/veh)	9.2	0.0	3.1
Approach LOS	A		

Intersection Summary			
Average Delay	5.2		
Intersection Capacity Utilization	25.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	102	19	122	244	6	35	39	97	58	7	0
Future Volume (vph)	0	102	19	122	244	6	35	39	97	58	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.7	3.7	3.7	3.0	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.979			0.998			0.923				
Flt Protected					0.984			0.990			0.957	
Satd. Flow (prot)	0	1844	0	0	1768	0	0	1721	0	0	1802	0
Flt Permitted					0.984			0.990			0.957	
Satd. Flow (perm)	0	1844	0	0	1768	0	0	1721	0	0	1802	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		249.9			142.9			204.7			275.7	
Travel Time (s)		18.0			10.3			14.7			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	102	19	122	244	6	35	39	97	58	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	121	0	0	372	0	0	171	0	0	65	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	1.09	1.04	1.04	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	102	19	122	244	6	35	39	97	58	7	0
Future Volume (Veh/h)	0	102	19	122	244	6	35	39	97	58	7	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	102	19	122	244	6	35	39	97	58	7	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					252							
pX, platoon unblocked												
vC, conflicting volume	250			121			606	606	112	719	612	247
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	250			121			606	606	112	719	612	247
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			91	90	90	78	98	100
cM capacity (veh/h)	1316			1467			378	377	942	266	374	792

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	121	372	171	65
Volume Left	0	122	35	58
Volume Right	19	6	97	0
cSH	1316	1467	572	275
Volume to Capacity	0.00	0.08	0.30	0.24
Queue Length 95th (m)	0.0	2.1	9.5	6.8
Control Delay (s/veh)	0.0	3.0	14.0	22.1
Lane LOS		A	B	C
Approach Delay (s/veh)	0.0	3.0	14.0	22.1
Approach LOS			B	C

Intersection Summary				
Average Delay		6.8		
Intersection Capacity Utilization		48.5%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	144	92	45	479	94	61
Future Volume (vph)	144	92	45	479	94	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.947				0.947	
Flt Protected				0.996	0.971	
Satd. Flow (prot)	1784	0	0	1876	1732	0
Flt Permitted				0.996	0.971	
Satd. Flow (perm)	1784	0	0	1876	1732	0
Link Speed (k/h)	50			48	50	
Link Distance (m)	355.4			240.4	252.4	
Travel Time (s)	25.6			18.0	18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	144	92	45	479	94	61
Shared Lane Traffic (%)						
Lane Group Flow (vph)	236	0	0	524	155	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.0	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)		97	97		97	97
Sign Control	Free			Stop	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	8	68	8	5	57
Future Volume (vph)	4	8	68	8	5	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.910		0.986			
Flt Protected	0.984					0.996
Satd. Flow (prot)	1557	0	1775	0	0	1793
Flt Permitted	0.984					0.996
Satd. Flow (perm)	1557	0	1775	0	0	1793
Link Speed (k/h)	30		50			50
Link Distance (m)	255.3		270.0			205.6
Travel Time (s)	30.6		19.4			14.8
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	8	68	8	5	57
Shared Lane Traffic (%)						
Lane Group Flow (vph)	12	0	76	0	0	62
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.0		0.0			0.0
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	17.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	4	8	68	8	5	57
Future Volume (Veh/h)	4	8	68	8	5	57
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	8	68	8	5	57
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	139	72			76	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	139	72			76	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	99			100	
cM capacity (veh/h)	851	990			1523	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	12	76	62
Volume Left	4	0	5
Volume Right	8	8	0
cSH	939	1700	1523
Volume to Capacity	0.01	0.04	0.00*
Queue Length 95th (m)	0.3	0.0	0.1
Control Delay (s/veh)	8.9	0.0	0.6
Lane LOS	A		A
Approach Delay (s/veh)	8.9	0.0	0.6
Approach LOS	A		

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	17.1%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	13	12	14	42	25	15	142	15	20	124	4
Future Volume (vph)	4	13	12	14	42	25	15	142	15	20	124	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.944			0.958			0.988			0.996	
Flt Protected		0.993			0.991			0.996			0.993	
Satd. Flow (prot)	0	1630	0	0	1651	0	0	1772	0	0	1781	0
Flt Permitted		0.993			0.991			0.996			0.993	
Satd. Flow (perm)	0	1630	0	0	1651	0	0	1772	0	0	1781	0
Link Speed (k/h)		30			30			50			50	
Link Distance (m)		255.3			233.9			276.2			204.7	
Travel Time (s)		30.6			28.1			19.9			14.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	13	12	14	42	25	15	142	15	20	124	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	81	0	0	172	0	0	148	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	13	12	14	42	25	15	142	15	20	124	4
Future Volume (Veh/h)	4	13	12	14	42	25	15	142	15	20	124	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	13	12	14	42	25	15	142	15	20	124	4
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	392	353	126	364	348	150	128			157		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	392	353	126	364	348	150	128			157		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	98	99	98	93	97	99			99		
cM capacity (veh/h)	511	558	924	563	562	897	1458			1423		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	29	81	172	148
Volume Left	4	14	15	20
Volume Right	12	25	15	4
cSH	658	636	1458	1423
Volume to Capacity	0.04	0.13	0.01	0.01
Queue Length 95th (m)	1.1	3.3	0.2	0.3
Control Delay (s/veh)	10.7	11.5	0.7	1.1
Lane LOS	B	B	A	A
Approach Delay (s/veh)	10.7	11.5	0.7	1.1
Approach LOS	B	B		

Intersection Summary					
Average Delay		3.6			
Intersection Capacity Utilization		25.1%	ICU Level of Service		A
Analysis Period (min)		15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	46	22	0	84	0	80	200	13	0	191	40
Future Volume (vph)	15	46	22	0	84	0	80	200	13	0	191	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.7	3.0	3.7	3.7	3.7	3.3	3.3	3.7	3.7	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.964						0.994			0.977	
Flt Protected		0.991						0.987				
Satd. Flow (prot)	0	1799	0	0	1883	0	0	1767	0	0	1759	0
Flt Permitted		0.991						0.987				
Satd. Flow (perm)	0	1799	0	0	1883	0	0	1767	0	0	1759	0
Link Speed (k/h)		30			48			50			50	
Link Distance (m)		262.7			156.9			226.4			252.4	
Travel Time (s)		31.5			11.8			16.3			18.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	15	46	22	0	84	0	80	200	13	0	191	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	83	0	0	84	0	0	293	0	0	231	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	0.99	1.09	0.99	0.99	0.99	1.04	1.04	0.99	0.99	1.04	1.04
Turning Speed (k/h)	24		14	97		97	24		97	97		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	46	22	0	84	0	80	200	13	0	191	40
Future Volume (Veh/h)	15	46	22	0	84	0	80	200	13	0	191	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	15	46	22	0	84	0	80	200	13	0	191	40
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	620	584	211	623	598	207	231			213		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	620	584	211	623	598	207	231			213		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	88	97	100	79	100	94			100		
cM capacity (veh/h)	320	398	829	338	391	834	1337			1357		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	83	84	293	231
Volume Left	15	0	80	0
Volume Right	22	0	13	40
cSH	439	391	1337	1357
Volume to Capacity	0.19	0.21	0.06	0.00
Queue Length 95th (m)	5.2	6.1	1.4	0.0
Control Delay (s/veh)	15.1	16.7	2.5	0.0
Lane LOS	C	C	A	
Approach Delay (s/veh)	15.1	16.7	2.5	0.0
Approach LOS	C	C		

Intersection Summary				
Average Delay		4.9		
Intersection Capacity Utilization		49.5%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	36	2	0	42	15	4	40	15	11	31	19
Future Volume (vph)	21	36	2	0	42	15	4	40	15	11	31	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3	3.0	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.964			0.966			0.958	
Flt Protected		0.983						0.997			0.991	
Satd. Flow (prot)	0	1700	0	0	1736	0	0	1734	0	0	1710	0
Flt Permitted		0.983						0.997			0.991	
Satd. Flow (perm)	0	1700	0	0	1736	0	0	1734	0	0	1710	0
Link Speed (k/h)		30			50			50			50	
Link Distance (m)		123.0			243.6			188.6			270.0	
Travel Time (s)		14.8			17.5			13.6			19.4	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	21	36	2	0	42	15	4	40	15	11	31	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	59	0	0	57	0	0	59	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04	1.09	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	36	2	0	42	15	4	40	15	11	31	19
Future Volume (Veh/h)	21	36	2	0	42	15	4	40	15	11	31	19
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	36	2	0	42	15	4	40	15	11	31	19
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (m)								338				
pX, platoon unblocked												
vC, conflicting volume	154	126	41	138	128	48	50			55		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	154	126	41	138	128	48	50			55		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	97	95	100	100	94	99	100			99		
cM capacity (veh/h)	761	758	1031	795	756	1022	1557			1550		

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	59	57	59	61
Volume Left	21	0	4	11
Volume Right	2	15	15	19
cSH	766	811	1557	1550
Volume to Capacity	0.08	0.07	0.00*	0.00*
Queue Length 95th (m)	1.9	1.7	0.1	0.2
Control Delay (s/veh)	10.1	9.8	0.5	1.4
Lane LOS	B	A	A	A
Approach Delay (s/veh)	10.1	9.8	0.5	1.4
Approach LOS	B	A		

Intersection Summary				
Average Delay		5.4		
Intersection Capacity Utilization		22.9%	ICU Level of Service	A
Analysis Period (min)		15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	73	0	7	87	142	7	24	7	129	15	6
Future Volume (vph)	6	73	0	7	87	142	7	24	7	129	15	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.919			0.975			0.995	
Flt Protected		0.996			0.999			0.991			0.959	
Satd. Flow (prot)	0	1793	0	0	1653	0	0	1740	0	0	1718	0
Flt Permitted		0.996			0.999			0.991			0.959	
Satd. Flow (perm)	0	1793	0	0	1653	0	0	1740	0	0	1718	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		243.6			224.2			327.4			276.2	
Travel Time (s)		17.5			16.1			23.6			19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	6	73	0	7	87	142	7	24	7	129	15	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	0	0	236	0	0	38	0	0	150	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary				
Area Type:	Other			
Control Type: Unsignalized				
Intersection Capacity Utilization	36.8%	ICU Level of Service A		
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	73	0	7	87	142	7	24	7	129	15	6
Future Volume (Veh/h)	6	73	0	7	87	142	7	24	7	129	15	6
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	6	73	0	7	87	142	7	24	7	129	15	6
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)					224							
pX, platoon unblocked												
vC, conflicting volume	229			73			271	328	73	276	257	158
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	229			73			271	328	73	276	257	158
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	96	99	80	98	99
cM capacity (veh/h)	1339			1527			661	585	989	646	641	887

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	79	236	38	150
Volume Left	6	7	7	129
Volume Right	0	142	7	6
cSH	1339	1527	648	653
Volume to Capacity	0.00*	0.00*	0.06	0.23
Queue Length 95th (m)	0.1	0.1	1.4	6.7
Control Delay (s/veh)	0.6	0.3	10.9	12.2
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.6	0.3	10.9	12.2
Approach LOS			B	B

Intersection Summary				
Average Delay	4.7			
Intersection Capacity Utilization	36.8%	ICU Level of Service	A	
Analysis Period (min)	15			

* Value less than 0.01.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	218	84	99	79	78	152
Future Volume (vph)	218	84	99	79	78	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.962				0.911	
Flt Protected	0.965		0.950			
Satd. Flow (prot)	1672	0	1711	0	1640	0
Flt Permitted	0.965		0.950			
Satd. Flow (perm)	1672	0	1711	0	1640	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	292.6			369.5	226.4	
Travel Time (s)	21.1			26.6	16.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	218	84	99	79	78	152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	302	0	99	79	230	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.3			3.3	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization Err%		ICU Level of Service	H
Analysis Period (min) 15			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	218	84	99	79	78	152
Future Volume (Veh/h)	218	84	99	79	78	152
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	218	84	99	79	78	152
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				369		
pX, platoon unblocked						
vC, conflicting volume	431	154	230			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	431	154	230			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	60	91	93			
cM capacity (veh/h)	538	892	1338			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	302	99	230
Volume Left	218	99	0
Volume Right	84	0	152
cSH	605	1338	1700
Volume to Capacity	0.50	0.07	0.14
Queue Length 95th (m)	21.2	1.8	0.0
Control Delay (s/veh)	16.7	7.9	0.0
Lane LOS	C	A	
Approach Delay (s/veh)	16.7	Err	0.0
Approach LOS	C		

Intersection Summary				
Average Delay		Err		
Intersection Capacity Utilization		Err%	ICU Level of Service	H
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	35	22	7	18	0
Future Volume (vph)	0	35	22	7	18	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.963		
Satd. Flow (prot)	1629	0	0	1814	1883	0
Flt Permitted				0.963		
Satd. Flow (perm)	1629	0	0	1814	1883	0
Link Speed (k/h)	48			70	70	
Link Distance (m)	222.1			472.7	364.2	
Travel Time (s)	16.7			24.3	18.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	35	22	7	18	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	35	0	0	29	18	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	18.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	35	22	7	18	0
Future Volume (Veh/h)	0	35	22	7	18	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	35	22	7	18	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	69	18	18			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	69	18	18			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	99			
cM capacity (veh/h)	923	1061	1599			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	35	29	18
Volume Left	0	22	0
Volume Right	35	0	0
cSH	1061	1599	1700
Volume to Capacity	0.03	0.01	0.01
Queue Length 95th (m)	0.8	0.3	0.0
Control Delay (s/veh)	8.5	5.5	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	5.5	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	18.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	54	65	0	56	27	18
Future Volume (vph)	54	65	0	56	27	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.926				0.946	
Flt Protected					0.971	
Satd. Flow (prot)	1667	0	0	1801	1654	0
Flt Permitted					0.971	
Satd. Flow (perm)	1667	0	0	1801	1654	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	248.4			142.5	275.7	
Travel Time (s)	17.9			10.3	19.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	54	65	0	56	27	18
Shared Lane Traffic (%)						
Lane Group Flow (vph)	119	0	0	56	45	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			0.0	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	16.8%	ICU Level of Service A	
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	54	65	0	56	27	18
Future Volume (Veh/h)	54	65	0	56	27	18
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	54	65	0	56	27	18
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	72	0	155	63	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	72	0	155	63	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	93	94	100	93	98	
cM capacity (veh/h)	805	1085	715	814	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	119	56	45
Volume Left	0	0	27
Volume Right	65	0	18
cSH	937	814	1623
Volume to Capacity	0.13	0.07	0.02
Queue Length 95th (m)	3.3	1.7	0.4
Control Delay (s/veh)	9.4	9.7	4.4
Lane LOS	A	A	A
Approach Delay (s/veh)	9.4	9.7	4.4
Approach LOS	A	A	

Intersection Summary			
Average Delay	8.5		
Intersection Capacity Utilization	16.8%	ICU Level of Service	A
Analysis Period (min)	15		

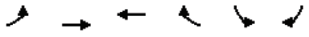
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	35	46	95	36	4
Future Volume (vph)	4	35	46	95	36	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.879				0.986	
Flt Protected	0.995			0.984		
Satd. Flow (prot)	1521	0	0	1772	1775	0
Flt Permitted	0.995			0.984		
Satd. Flow (perm)	1521	0	0	1772	1775	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	146.2			126.7	150.2	
Travel Time (s)	17.5			9.1	10.8	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	4	35	46	95	36	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	141	40	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			0.0	0.0	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	24.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	35	46	95	36	4
Future Volume (Veh/h)	4	35	46	95	36	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	4	35	46	95	36	4
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	225	38	40			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	225	38	40			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	97	97			
cM capacity (veh/h)	741	1034	1570			

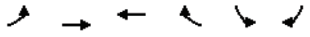
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	39	141	40
Volume Left	4	46	0
Volume Right	35	0	4
cSH	994	1570	1700
Volume to Capacity	0.04	0.03	0.02
Queue Length 95th (m)	0.9	0.7	0.0
Control Delay (s/veh)	8.8	2.6	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.8	2.6	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	24.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	47	167	322	143	116	120
Future Volume (vph)	47	167	322	143	116	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.0	3.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.958		0.931	
Flt Protected		0.989			0.976	
Satd. Flow (prot)	0	1781	1725	0	1580	0
Flt Permitted		0.989			0.976	
Satd. Flow (perm)	0	1781	1725	0	1580	0
Link Speed (k/h)		50	50		30	
Link Distance (m)		142.9	108.9		273.9	
Travel Time (s)		10.3	7.8		32.9	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	47	167	322	143	116	120
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	214	465	0	236	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.0	3.0		3.0	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.09	1.09
Turning Speed (k/h)	24			14	24	14
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 60.8%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	167	322	143	116	120
Future Volume (Veh/h)	47	167	322	143	116	120
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	47	167	322	143	116	120
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)			109			
pX, platoon unblocked	0.94				0.94	0.94
vC, conflicting volume	465				655	394
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	395				597	318
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				72	82
cM capacity (veh/h)	1090				417	676

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	214	465	236
Volume Left	47	0	116
Volume Right	0	143	120
cSH	1090	1700	518
Volume to Capacity	0.04	0.27	0.46
Queue Length 95th (m)	1.0	0.0	17.9
Control Delay (s/veh)	2.2	0.0	17.6
Lane LOS	A		C
Approach Delay (s/veh)	2.2	0.0	17.6
Approach LOS			C

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	60.8%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	53	46	22	174	12	22
Future Volume (vph)	53	46	22	174	12	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.0	3.0	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.937				0.913	
Flt Protected				0.994	0.983	
Satd. Flow (prot)	1629	0	0	1728	1616	0
Flt Permitted				0.994	0.983	
Satd. Flow (perm)	1629	0	0	1728	1616	0
Link Speed (k/h)	30			30	50	
Link Distance (m)	196.8			262.7	254.1	
Travel Time (s)	23.6			31.5	18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	53	46	22	174	12	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	0	0	196	34	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.3	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.09	1.09	1.04	1.04
Turning Speed (k/h)		14	24		24	14
Sign Control	Stop			Stop	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	53	46	22	174	12	22
Future Volume (Veh/h)	53	46	22	174	12	22
Sign Control	Stop			Stop	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	53	46	22	174	12	22
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	46	0	108	35	0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	46	0	108	35	0	
tC, single (s)	6.5	6.2	7.1	6.5	4.1	
tC, 2 stage (s)						
tF (s)	4.0	3.3	3.5	4.0	2.2	
p0 queue free %	94	96	97	80	99	
cM capacity (veh/h)	839	1085	790	851	1623	

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	99	196	34
Volume Left	0	22	12
Volume Right	46	0	22
cSH	938	844	1623
Volume to Capacity	0.11	0.23	0.00*
Queue Length 95th (m)	2.7	6.8	0.2
Control Delay (s/veh)	9.3	10.6	2.6
Lane LOS	A	B	A
Approach Delay (s/veh)	9.3	10.6	2.6
Approach LOS	A	B	

Intersection Summary			
Average Delay	9.3		
Intersection Capacity Utilization	27.0%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	90	325	191	56	4	188	13	209	3	12	16
Future Volume (vph)	51	90	325	191	56	4	188	13	209	3	12	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.906			0.998			0.931			0.930	
Flt Protected		0.995			0.963			0.978			0.995	
Satd. Flow (prot)	0	1623	0	0	1731	0	0	1640	0	0	1666	0
Flt Permitted		0.995			0.963			0.978			0.995	
Satd. Flow (perm)	0	1623	0	0	1731	0	0	1640	0	0	1666	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		200.3			292.6			336.6			254.1	
Travel Time (s)		14.4			21.1			24.2			18.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	51	90	325	191	56	4	188	13	209	3	12	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	466	0	0	251	0	0	410	0	0	31	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.0			3.0			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 81.9%		ICU Level of Service D	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	90	325	191	56	4	188	13	209	3	12	16
Future Volume (Veh/h)	51	90	325	191	56	4	188	13	209	3	12	16
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	51	90	325	191	56	4	188	13	209	3	12	16
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)		200										
pX, platoon unblocked				0.99			0.99	0.99	0.99	0.99	0.99	
vC, conflicting volume	60			415			817	797	253	1010	957	58
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	60			399			807	786	234	1003	949	58
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			83			21	95	74	98	94	98
cM capacity (veh/h)	1544			1143			237	257	793	131	207	1008

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	466	251	410	31
Volume Left	51	191	188	3
Volume Right	325	4	209	16
cSH	1544	1143	370	320
Volume to Capacity	0.03	0.17	1.11	0.10
Queue Length 95th (m)	0.8	4.6	115.1	2.4
Control Delay (s/veh)	1.1	7.0	112.7	17.4
Lane LOS	A	A	F	C
Approach Delay (s/veh)	1.1	7.0	112.7	17.4
Approach LOS			F	C

Intersection Summary					
Average Delay		42.3			
Intersection Capacity Utilization		81.9%	ICU Level of Service		D
Analysis Period (min)		15			

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	1	10	59	33	0
Future Volume (vph)	0	1	10	59	33	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (m)	3.0	3.0	3.3	3.3	3.3	3.3
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.865					
Flt Protected				0.993		
Satd. Flow (prot)	1504	0	0	1788	1801	0
Flt Permitted				0.993		
Satd. Flow (perm)	1504	0	0	1788	1801	0
Link Speed (k/h)	30			50	50	
Link Distance (m)	123.6			149.6	188.6	
Travel Time (s)	14.8			10.8	13.6	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	1	10	59	33	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1	0	0	69	33	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	1.09	1.09	1.04	1.04	1.04	1.04
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	20.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1	10	59	33	0
Future Volume (Veh/h)	0	1	10	59	33	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	1	10	59	33	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)				150		
pX, platoon unblocked						
vC, conflicting volume	112	33	33			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	112	33	33			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	99			
cM capacity (veh/h)	879	1041	1579			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	1	69	33
Volume Left	0	10	0
Volume Right	1	0	0
cSH	1041	1579	1700
Volume to Capacity	0.00*	0.00*	0.02
Queue Length 95th (m)	0.0	0.1	0.0
Control Delay (s/veh)	8.5	1.1	0.0
Lane LOS	A	A	
Approach Delay (s/veh)	8.5	1.1	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	20.3%	ICU Level of Service	A
Analysis Period (min)	15		

* Value less than 0.01.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	119	120	0	0	39	52	40	0	159	0
Future Volume (vph)	0	0	119	120	0	0	39	52	40	0	159	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.865						0.959				
Flt Protected					0.950			0.985				
Satd. Flow (prot)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Flt Permitted					0.950			0.985				
Satd. Flow (perm)	0	1629	0	0	1789	0	0	1779	0	0	1883	0
Link Speed (k/h)		48			48			48			48	
Link Distance (m)		628.8			747.6			191.7			1097.2	
Travel Time (s)		47.2			56.1			14.4			82.3	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	0	119	120	0	0	39	52	40	0	159	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	119	0	0	120	0	0	131	0	0	159	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			0.0			0.0	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	39.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	119	120	0	0	39	52	40	0	159	0
Future Volume (Veh/h)	0	0	119	120	0	0	39	52	40	0	159	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	0	119	120	0	0	39	52	40	0	159	0
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	0			119			379	300	60	366	359	0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0			119			379	300	60	366	359	0
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			92			91	91	96	100	69	100
cM capacity (veh/h)	1623			1469			416	563	1006	495	521	1085

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	119	120	131	159
Volume Left	0	120	39	0
Volume Right	119	0	40	0
cSH	1623	1469	580	521
Volume to Capacity	0.00	0.08	0.23	0.31
Queue Length 95th (m)	0.0	2.0	6.6	9.7
Control Delay (s/veh)	0.0	7.7	13.0	14.9
Lane LOS		A	B	B
Approach Delay (s/veh)	0.0	7.7	13.0	14.9
Approach LOS			B	B

Intersection Summary				
Average Delay		9.4		
Intersection Capacity Utilization		39.0%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	39	14	29	53	0
Future Volume (vph)	0	39	14	29	53	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.850					
Flt Protected				0.984		
Satd. Flow (prot)	0	0	0	1853	1883	0
Flt Permitted				0.984		
Satd. Flow (perm)	0	0	0	1853	1883	0
Link Speed (k/h)	48			48	48	
Link Distance (m)	234.6			438.8	472.7	
Travel Time (s)	17.6			32.9	35.5	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	39	14	29	53	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	43	53	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	0.0			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	97	97	97			97
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	39	14	29	53	0
Future Volume (Veh/h)	0	39	14	29	53	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	0	39	14	29	53	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	110	53	53			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	110	53	53			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	96	99			
cM capacity (veh/h)	879	1014	1553			

Direction, Lane #	NB 1	SB 1
Volume Total	43	53
Volume Left	14	0
Volume Right	0	0
cSH	1553	1700
Volume to Capacity	0.00*	0.03
Queue Length 95th (m)	0.2	0.0
Control Delay (s/veh)	2.4	0.0
Lane LOS	A	
Approach Delay (s/veh)	2.4	0.0
Approach LOS		

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

* Value less than 0.01.