

Town of Milton Fire Master Plan

March 2008



05-4654

Submitted by

**Dillon Consulting
Limited**

March 11, 2008

Mr. Brian Ellsworth, CMMIII
Fire Chief
Town of Milton
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Town of Milton Fire Master Plan, Final Report

Dear Sir:

We are pleased to submit our Final Report for the Town of Milton Fire Master Plan. It has been a pleasure working with you and all of the Fire Department and other Town staff involved in this project.

We hope this document serves you well in the years to come and we remain available to assist in any way we can.

Yours sincerely,

Dillon Consulting Limited


Per. Claudio Covelli, M.A.
Partner

CC:mrbr
Encl.
Our File: 05-4654
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1.0 INTRODUCTION

The Town of Milton is Canada's fastest growing community, with an urban population that has almost doubled in the last five years. Milton's population is approximately 64,000 in 2007 and it is projected to grow to a population of 130,000 by 2021. As a result of this growth, demands on the current system of public fire protection have and will continue to increase in a significant manner.

The Town last conducted a Fire Master Plan in 1998. The plan addressed inconsistencies in meeting minimum response time and staffing requirements outlined by the Ontario Fire Marshal's Office. Recommendations were set forth to target response issues. Many of the recommendations have been successfully implemented and the response situation, although still challenged, has been greatly improved. The Milton Fire Department now provides 24-hour response coverage, seven days per week from Station 3 on Derry Road, and part-time forces responding from Station 1 on Steeles Avenue, Station 2 in Campbellville in addition to Station 3.

1.1 CONTEXT: DESTINY MILTON 2

The Town of Milton recently adopted the Destiny Milton 2 Strategic Plan. A number of more detailed Service Area Master Plans and an Integrated Implementation Plan form the second phase of the process. Service Area Master Plans are being prepared for each Town Department including:

- Fire Services;
- Information Technology;
- Library Services;
- Engineering Services;
- Community Services;
- Executive Services/Economic Development; and
- Corporate Services.

The purpose of each Service Area Master Plan was to develop a practical strategy based on a clear understanding of the Town's growth and resource limitations. The plans (including this Fire Master Plan) provide operational direction that is aligned to and integrated with the Destiny Milton 2 Strategic Plan.

1.1.1 Telephone Survey

A comprehensive telephone survey was conducted as part of Destiny Milton 2 to explore a variety of issues concerning the Milton community. The results of the survey reveal an overall positive impression of Milton. Residents specified that they value the small town character, appreciate the proximity of both urban centres and rural areas, enjoy the safe and secure nature of the Town and have high regard for the large amount of green space around the community. The close proximity to Highway 401 and the Greater Toronto Area were cited as top reasons for moving to Milton.

The residents of Milton identified a number of issues of concern as well. These include rapid population growth, traffic and road conditions, public services, housing options, and a lack of alternative transportation.

The survey captured residents' attitudes toward services delivered/offered in the Town of Milton. Two aspects of the fire department were assessed:

- firefighting services; and
- fire prevention and education.

When asked about the importance and satisfaction of the various public services, 95% of respondents indicated that firefighting services were 'very important' to them and 83% expressed a high satisfaction level with the service. With respect to fire prevention and education, 86% of residents indicated that this service was 'very important' to them, and 75% of residents being satisfied with the level of service provided.

With regards to spending and funding for Milton firefighting services, the study indicated that 38% of respondents are in favour of spending more on this service and 1% of respondents are in favour of spending less. When respondents were asked where additional funds should come from, 41% were in favour of increased taxes, 10% were in favour of user fees and 38% of respondents were in favour of using a combination of both sources of funds.

For fire prevention services, the study found that 20% of residents were in favour of spending more on this service and 4% of respondents would favour spending less. The study also established that 32% of respondents are willing to fund increased service through taxes, 17% through user fees and 42% using a combination of both funding sources.

With regards to spending and funding for public fire education services, the study indicated that 38% of respondents are in favour of spending more on this service and 1% of respondents would favour spending less. When respondents were asked where additional funds should come from 41% were in favour of increased taxes, 10% were in favour of user fees, and 38% of respondents were in favour of using a combination of both sources of funds.

1.2 GOALS AND OBJECTIVES

The goal of the Fire Master Plan is to respond to the needs of a growing community while addressing the requirements of the Fire Protection and Prevention Act and the guidelines established by the Office of the Fire Marshal.

The objective of the Fire Master Plan is to re-examine and enhance municipal fire services within the context of future growth and the pressures it would place on service delivery. The Milton Fire Department fulfills a vital part of the town's strategic plan through the of range of programs it delivers, designed to protect the lives and property of the inhabitants from the adverse effects of fires, sudden medical emergencies or exposure to dangerous conditions created by man or nature in the municipality.

The Fire Master Plan focused on assessing the organizational impacts of any recommended changes to service delivery, including human resource and organizational configuration implications. A ten-year horizon for the Department was considered while a three-year horizon was set as the timeline for achieving high-priority initiatives. An implementation plan also formed part of the plan, identifying costs, timing, funding sources and staffing/resource requirements.

The plan includes an evaluation and assessment of:

- Administration and support operations structure and program delivery;
- Radio communications and technological needs;
- Training;
- Maintenance;
- Fire prevention and public education;
- Mutual aid and automatic aid agreements with neighbouring municipalities;
- Emergency response performance measures and best practices, including staffing levels, the number and location of stations, vehicles and apparatus (new and replacement);
- Development of service delivery evaluation tools; and
- Cost of the recommended plan including Development Charge implications.

This report contains the consultant's findings and recommendations based on information provided by the Town of Milton and background material related to previous studies and other analyses undertaken by the consultant.

2.0 DESCRIPTION OF THE DEPARTMENT

The Milton Fire Department provides fire suppression capability, rescue and fire prevention and public education programs in accordance with provincial laws and regulations. Provincial fire codes are enforced and the public water supply (within the urban area) is designed to the high volume needs of firefighting.

The firefighting force is involved in fire suppression, hazardous goods control, vehicular accident extrications and other emergency activities. The cost of these services is a municipal responsibility, falling under the Ontario Fire Protection and Prevention Act of 1997. The Milton Fire Department provides limited medical response by way of a Level B tiered response agreement.

The Milton Fire Department is a composite force comprised of some career firefighters in the urban area and part-time firefighters in both the rural and urban areas. Fire and emergency services are provided through the career and part-time forces which operate under the same management structure. They function as a cohesive unit with respect to operations, training and equipment.

The Milton Fire Department protects a population in the urban and rural areas of approximately 64,000 residents¹, defending an area of approximately 373 square kilometres. It operates from three fire stations, two in the urban area and one in the rural area. Station 1 is the headquarters station housing management, full-time training, prevention, and support services staff as well as part-time suppression staff. Twenty-four hour coverage was implemented in 2004 at Station 3 (Derry Road) to improve response time coverage and to augment the complement of part time firefighters. The rural Station 2 in Campbellville houses part-time staff.

In 2004, the department received a Certificate of Compliance from the Office of the Ontario Fire Marshal for completing the Municipal Fire Protection Information Survey (MFPIS). This included completing a Simplified Risk Assessment for Milton. This exercise creates a community fire profile to ensure that identified risks are targeted by appropriate programs or activities to meet the community's fire safety needs.

2.1 DEPARTMENT STRUCTURE AND ORGANIZATION

The Fire Department management team currently includes two senior personnel: the Fire Chief and the Deputy Fire Chief. A second Deputy Chief has been approved as a full time staff addition commencing July 2008. The Fire Department reports to Council through the Chief Administrative Officer.

The department operates through five Divisions separated by function, including:

- Administration;
- Support Services;
- Emergency Operations;
- Training; and
- Fire Prevention.

¹ 2007 estimate

The Milton Fire Department currently employs 115 staff (32 career and 83 part-time firefighters). Town Council has approved the addition of five full-time Firefighter / Technicians to the fire department complement commencing March 2008. The number of part-time firefighters fluctuates due to attrition. The Fire Department's organizational structure is highlighted in **Figure 1**.

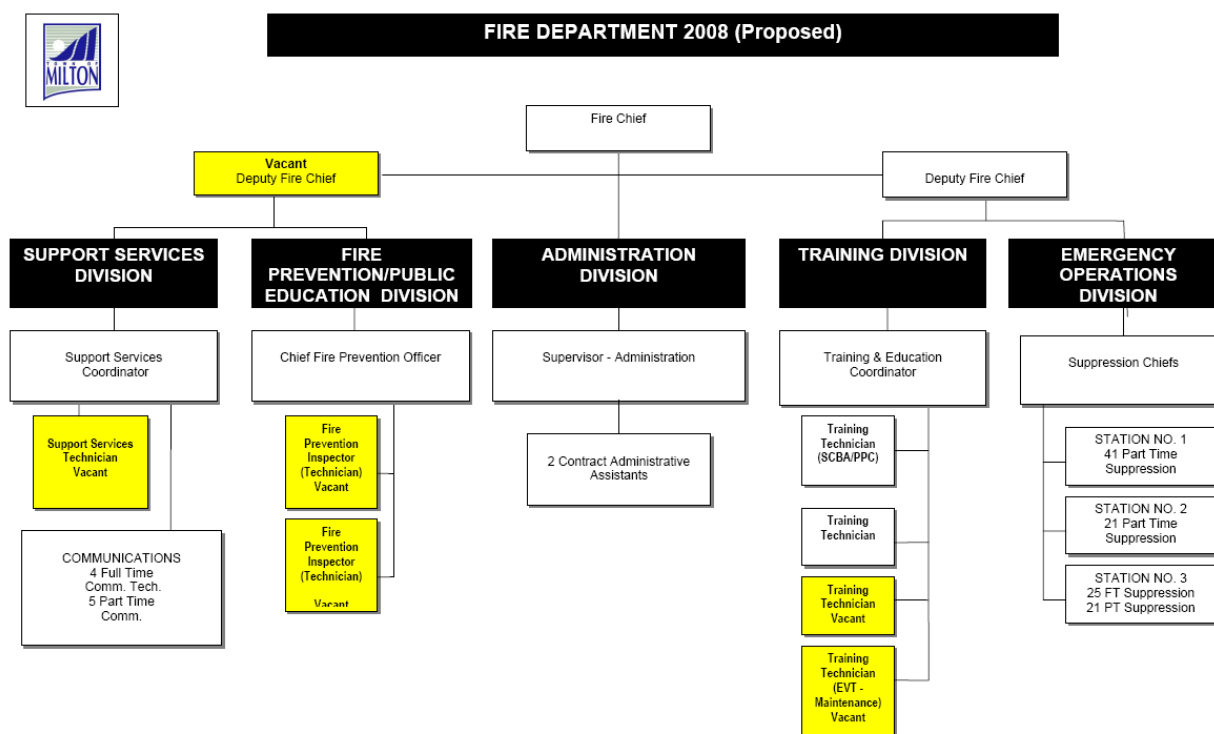


Figure 1 - Milton Fire Department Organization Chart

2.1.1 Management

The Fire Chief and Deputy Fire Chief currently share the responsibility of providing 24-hour per day coverage, seven days per week in the event of emergencies. By practice, one of the two senior managers remains available to cover for the other in the event of any leave (e.g. training, vacation, sickness). They do not assign shifts and it is possible that both may be unavailable for responding to emergencies that require their presence (e.g. significant structure fires).

With the anticipated addition of a second Deputy Fire Chief (July 2008), the additional senior manager will also be available to respond to a significant incident, especially during non-core hours. This will allow a more equal distribution of department responsibilities. The sharing of responsibilities will be divided between operations, training, fire prevention, support services and administration duties with the Fire Chief providing overall strategic direction and leadership. The second Deputy Fire Chief will also assume the role of Alternate Community Emergency Management Coordinator (CEMC)

The senior managers split their roles between two areas: operations and administration. The former includes emergency operations, rescue and training, while the latter encompasses the areas of communications, fire prevention and public education. The complexities of running a composite department weigh on management staff. As the municipality grows and the Fire Department grows to match, so will the call volume and

management challenges in every area of Fire Department operations. Not only do day to day existing demands need to be met, but as the Department adds Fire Stations, additional apparatus and staff, accommodating the growth on top of the base load work will require additional management assistance. A second Deputy Chief capable of sharing senior management responsibilities and workload would provide such relief. The additional senior manager would be available to respond to a significant incident, especially during non-core hours, and would allow a more equitable distribution of department responsibilities. The sharing of the responsibilities could be split along the operations and administration lines with the Fire Chief providing overall strategic direction and leadership.

As the Milton Fire Department evolves and expands, the composite structure will present additional challenges. Currently, the District Chief position is a part-time position that is ranked higher than that of full-time Captain. Currently District Chiefs in Milton have upwards of twenty years of experience. Situations may occur as the department grows whereby part-time District Chiefs will have less experience than full-time Captains, but will be the ranking officers on scene. The department is aware that this situation is developing. Emphasis on succession planning and additional training for senior part-time and career officers would help mitigate potential problems. It may also be necessary to review the command structure for incidents.

The following is the recommendation flowing from the review of Department Management:

1. Senior Officer Development

The evolution and growth of the composite department to one that has an increasingly reliance on career firefighters will require emphasis on succession planning and senior officer development. The department should be proactive in managing this change.

2.1.2 Administration Division

The department's Administration Division is led by an Administration Supervisor and supported by two part-time assistants. Each assistant works part-time (0.6 FTE and 0.4 FTE for six months or 0.8 FTE overall) to provide the department with administrative and clerical support. Department statistics are processed and analyzed by the Administrative Division. This includes data entry and analysis for emergency response calls and any required data reporting for the Ontario Fire Marshal's Office (e.g. response results for eligible emergency calls). These activities have been streamlined by the Division's effective use of records management software. This expertise is carried over into other department Divisions to assist with their needs (e.g. training records) with administrative staff providing support with data entry.

Other Division activities include the issuance of burn permits as well as distribution of alarm invoices, burn permit violation notices and inspection invoices. It includes the coordination of accounts payable activities is done by administrative staff (e.g. billing for motor vehicle accidents on Ministry of Transportation Ontario Highways and invoicing for contract calls with other municipalities). The tracking of on-call and training hours for part-time firefighters is another important duty that the Administration Division carries out. Overtime and pay raises are tracked by administrative staff for full time firefighters as part of these payroll processes.

The Division administrator participates on various Town committees (e.g. records management, health and safety) and is responsible for quality control for call data produced by the Communications Division's

dispatching staff. There is also a reception role for administrative staff to fill, since they are located at the Central Station's main entrance.

The past year was particularly involved for the Administration Division, given the introduction of expiry dates for burn permits. The latter were previously valid indefinitely. A six-month contract for an administrative assistant was extended in 2006 and 2007 in order to cope with the sudden increase in activity (estimate of 1300 permits requested). It is expected that burn permit renewals will now recur every year.

The following are the recommendations flowing from the review of the Administration Division:

2. Full-time Administrative Support Position

In order to provide sufficient support to address the increased day-to-day functions of the Division and the clerical support for a growing department the 0.4 FTE (for six months) position should be expanded to full-time.

2.1.3 Support Services Division

The Support Services Division, which is led by a coordinator, is responsible for communications within the department, mapping and information technology (IT) liaison, as well as, development planning and review activities. The broad area of communications includes the dispatching system, radio systems (in-vehicle, portable and back-up), pagers and any specialized equipment. In addition to dispatching, the Division is responsible for asset management within the department.

There are currently four full time and five part time communicators who are assigned to the communication function at the Central Station. This permits 24 hour coverage with allowances for vacation and leave. The space available for the communications activities is very limited at Central Station. Consideration should be given to providing better space allocation when a new station is built or when Central Station is renovated.

A computer-aided dispatch (CAD) system will soon be implemented by the Support Services Division. This improvement will allow for a "manual" emergency call dispatching system to be replaced by a more sophisticated computerized system, integrated with a Geographic Information System (GIS). The CAD system will automatically suggest routing based on pre-loaded scenarios and will be tied into the department's records management system. The system is expected to improve quality control for call tracking.

The Support Services Division ensures that the Town's engineering standards are followed and enforced within the development plan and building permit processes. The workload for planning and review for development is heaviest in the winter and spring as preparations for the construction season approach (e.g. site plan and subdivision approvals sought). This role falls to the Division Coordinator who must balance other roles and responsibilities during the busy planning and review period. As part of the approved hires for 2008, a Support Services Technician (Firefighter / Technician) will be assigned to assist with this function.

Recent changes to the Building Code Act in Ontario have placed additional pressures on Planning and Fire Department staff for the review of building plans submitted with permit applications. Time limits are now in effect for both reviewing applications and conducting any required inspections. With the pace of development occurring within the Town of Milton, consideration should be given to allocating staff dedicated to building plan review and inspection activities. With the growth in permitting comes increased permitting

fees to offset the cost, which are currently collected by the Planning and Development Department, but the revenue is not shared. As part of the approved hires for 2008, Fire Prevention Inspector(s) (Firefighter / Technician) will be assigned to fulfill this function.

Cooperation between the Planning and Development Department and the Fire Department is good and allows for a sharing of information. Obtaining digital building information (e.g. blueprints) from Planning and Development for use by the Fire Department may be very useful for pre-fire planning. Eventually, this could be accessed by responding firefighters while en-route to an emergency by using Mobile Data Terminals. This work is in the preliminary planning phase.

Internal use of GIS capabilities within the Fire Department is being planned. This would allow the Division to undertake several activities such as:

- tracking the status of their own development and review activities;
- highlighting sites/locations with available pre-fire planning information and link these to the GIS;
- visually tracking emergency response calls; and
- reviewing the timing of station location plans internally, on an interim basis.

Significant progress has been made in recent years toward the creation of a mobile backup communication system. In the event of an emergency evacuation or breakdown, this system can be deployed to replace the main system at Central Station. This ensures that the essential roles of dispatch and radio communication can be maintained under adverse conditions. The planning and implementation for this initiative fell under the responsibilities of the Support Services Division.

The Milton Fire Department is well positioned to take advantage of new industry trends and/or products. The Support Services Division has recently completed or is in the process of completing a number of significant projects aimed at streamlining department operations. The Division has a strong team in place to assess the merits of new equipment and/or process technologies, but will be challenged to keep up with the workload increase of an expanding municipality.

While facility maintenance is provided for the rural fire station through Milton's Community Services Division, the Support Services Division is responsible for coordinating maintenance and repairs to Stations 1 and 3.

The following are the recommendations flowing from the review of the Support Services Division:

3. Additional Space for Communications

The current layout at the Steeles Avenue station is limited for communication functions. When a new station is built or when Central Station is renovated, the space allocation for communications should be increased.

4. Computer Aided Dispatch System

The department has been working on the implementation of a Computer Aided Dispatch (CAD) system for more than one year. The finished product will be integrated with the department's records management software. The system is expected to improve quality control for call tracking. Mobile data terminals are recommended to be used in conjunction with the CAD system.

5. CAD / FDM Analyst

The ongoing maintenance and support of the Computer Aided Dispatch System warrants the addition of an Analyst to help support the GIS and CAD functions for the fire department. In addition to day-to-day activities, the Analyst would also participate in the review of critical mapping, infrastructure and other Town programming conducive with the implementation of the new CAD system. This would include evaluating and assisting with a migration to more effective department and corporate use of GIS and other new technology. The department has been working with other Town departments on the use of GIS to streamline department activities in the areas of Fire Prevention (inspection activities, pre-fire planning, station location testing, water-source mapping, etc.).

2.1.4 Training Division

The Training Division is led by a Training and Education Coordinator who is responsible for department training (coordination, research and delivery), equipment maintenance (i.e. thermal imaging, breathing apparatus) and media relations. The Division Coordinator is assisted by two Training Technicians, one who provides assistance with training research and delivery and another responsible for a limited training delivery role and technical maintenance. This dual role is limiting the amount of time spent on training. The department's participation in the co-operative education program is an initiative lead by the Training Division, however recently this program has been discontinued due to work load constraints.

Department training primarily focuses on fire suppression using a modified version of the Ontario Fire Marshal's curriculum. Certain aspects of the full curriculum were found to have too much emphasis on incidents that Milton firefighters would seldom be exposed to. Training efforts have instead been directed to modules that more closely represent typical response types for the department. It is estimated that 90% of the Ontario Fire Marshal's curriculum is followed.

The department offers the same core training modules for full-time firefighters as for part-time firefighters which ensures that all firefighters train to a consistent standard. The training program recognizes the need to stay current with changes in the fire service. A "train-the-trainer" approach to service delivery is employed to ensure that staff are trained to accredited standards and practices and are compliant with Provincial Health and Safety legislation (e.g. Section 21 of the Occupational Health and Safety Act).

The department offers a high level of specialized training, supplementing in-house knowledge with external specialist training for certification of the program elements. Thereafter, a train-the-trainer approach is used with off-shift internal staff on paid overtime. Training for automated external defibrillator (AED) use, high-angle rope rescue, water rescue, ice rescue, hazardous spill response and confined space is done internally. Division staff also provides D-Z license training and deliver EMS First Responder training. Training on specialized equipment such as thermal imaging camera and CO detector monitoring is done in-house. Generally, firefighters assist with equipment maintenance and training duties. Trainer roles are assigned based on personal interests and/or abilities.

With the growth in the department and to improve the level of service and attention to training an additional person is required to help deliver technical training. As part of the approved hires for 2008, a Training Technician (Firefighter / Technician) will be assigned to fulfill this function.

Given the department's size, it is not realistic to expect that all specialized training could or should be offered by department staff. Neither should it be expected that all staff receive all types of specialized training. For

example, the department trains staff to different levels for ice, water and confined space rescue ranging from levels of “awareness” to “operations” to “technician”. Opportunities for joint training with adjacent municipalities or industrial partners are being explored (e.g. trench rescue, hazardous materials). Options for external training through the Ontario Fire College or Office of the Fire Marshal are being investigated and pursued.

The documentation of training activities for all staff is onerous and increasingly seen as necessary to meet health and safety and risk management needs. This is currently carried out by the Training Coordinator and the responsibility should be shifted to other staff to spread the workload. Other fire departments are moving toward record management software to assist with this task. The Milton Fire Department’s familiarity with records management software positions it well to undertake such a shift.

There is an emerging need to focus on succession planning in order to prepare less experienced staff for eventual management roles. Succession planning is expected to be a challenge for the Milton Fire Department, given the growth anticipated. Future training should focus on fire ground management skills and interpersonal skills through an Officer Development Program.

Ongoing training is essential to maintaining a well-prepared suppression force. This requires qualified training staff and facilities for working with apparatus and equipment under fire and other simulation conditions. Some training exercises are currently carried out at Central Station (Steeles Avenue). The station has a large bay area that was converted into a training hall with classroom-type tables and chairs. An area behind the station had been used for extrication training with sufficient space to run scenarios involving buses. Increased urbanization has limited such options and stopped live fire exercises and drills involving use of water.

New training space is needed to replace the role that Central Station played for all training functions, including classroom, vehicle extrication, water supply, confined space and live fire exercises. Temporary accommodations for classroom training have been made at 555 Industrial Drive.

Training coordinates the issuing of firefighters’ personal protective equipment (“bunker gear”), which includes periodic replacement (i.e. every six years) and equipping new recruits. Each firefighter has their own Self Contained Breathing Apparatus (SCBA) mask and the Training Division is responsible for maintaining these and related SCBA equipment. Air filling stations are calibrated and monitored in each of three stations, with a backup system located in Central Station. Milton has a very good SCBA equipment care and repair systems. Their primary supplier of SCBA equipment (MSA) sometimes uses their system as a model.

The department does not have dedicated resources (i.e. Emergency Vehicle Technician – EVT) to attend to apparatus maintenance and repair issues. External mechanics are used for this purpose with a full time Captain on retainer to look after the Fire Department fleet. Given that this individual works on a rotating shift schedule, he is not always on hand when problems are identified and/or when breakdowns occur. Preventative maintenance is not being done to the level that it should be. Some additional assistance is required to maintain the current arrangements and to handle the expected growth in the department. This dedicated person would be responsible for maintaining the vehicle fleet, doing the annual testing and inspections (e.g. annual MTO inspections, hose/ladder testing) and could take over the equipment care and repair program. This person would also be available for firefighting when required. As part of the approved hires for 2008, a Training Technician – EVT (Firefighter / Technician) will be assigned to fulfill this function.

The Town has a Corporate Fleet section and some consideration has been given to including Fire Department

apparatus within their control. Some fire departments are moving towards Emergency Vehicle Technician (EVT) certification for mechanics that service department vehicles, which the Town should consider. Another option is to assemble a team on a set shift that has adequate mechanical skills.

The fire department has a current large apparatus fleet of over a dozen vehicles. Growth is expected as new stations are built, staffed and equipped and the Town would be better served with specialized mechanics for their apparatus and equipment. Having these mechanics fall under the fire departments direct span of control would be a benefit in that 24 hour service would be available for quick repairs such as tire changes, towing and air brake checks. Training on new apparatus could also be done by mechanical staff. This would more easily be done by mechanics working a conventional work week.

The following are the recommendations that flow from the review of the Training Division:

6. Additional Space for Training Activities

The current stations do not have sufficient space to carry out training activities. Proper training facilities are required and must include additional space for indoor and outdoor training activities.

7. Explore Apparatus Maintenance Options

A more comprehensive review of departmental apparatus and equipment maintenance issues should be undertaken with a view to establishing inspection, preventative maintenance and routine/emergency repair options. As the department continues to evolve and expand, the need for a dedicated fleet and equipment asset protection program becomes more critical. A total of thirteen additional vehicles were identified within the DC study at a cost of \$3.8 Million.

2.1.5 Fire Prevention Division

The Town of Milton Fire Department carries out a typical fire prevention enforcement and public fire safety education program, within the guidelines of the Fire Protection and Prevention Act, 1997 (FPPA). Under the FPPA, "every municipality shall, establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention; and provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances."

The minimum acceptable model includes:

- a smoke alarm program with home escape planning;
- the distribution of fire safety education material to residents/occupants;
- inspections upon complaint or when requested to assist with code compliance (including any necessary code enforcement); and
- a simplified risk assessment.

The Fire Prevention Division is responsible for most department fire prevention and public education activities including inspections. The current Division Coordinator is the only resource within the division to carry out the numerous activities in these areas. Certain activities have been assigned to staff in Support Services and Training in order to cover the range of programs and services delivered. As part of the approved hires for 2008, two Fire Prevention Inspectors (Firefighters / Technicians) will be assigned to assist in the Fire Prevention Division.

The Fire Department undertook a simplified risk assessment in 2002 that was completed within the Ontario Fire Marshal's guidelines. The objective of the risk assessment is to ensure that the public education and fire prevention programs delivered in the community, as mandated under the Fire Protection and Prevention Act (FPPA), match community needs and circumstances.

The risk assessment considers a community's demographics and building stock profile and compares municipal loss statistics with provincial averages. This approach allows the identification of fire safety concerns specific to the community which can then be prioritized and targeted.

A few areas needing attention were identified in the Simplified Risk Assessment. Chief among these were:

- identification of migrant farm workers as a vulnerable group due to language and/or cultural barriers;
- identification of a large population of seniors that live on their own;
- identification of language barrier with some apartment complex superintendents;
- acknowledgement of a seasonal increase in population during the summer months;
- acknowledgement of difficulty reaching rural areas within 10 minutes from time of call; and
- identification of areas with high risk buildings and/or properties where significant economic or social impacts would be felt in the event of a serious fire (e.g. older buildings on Main Street).

The Town assessed the suitability of the programs they were delivering (at the time the risk assessment was undertaken) to determine whether any critical gaps existed. A number of initiatives were implemented to address gaps including a home visit program called the "Smoke Alarm Awareness Program" and an adjustment to the complaint/request inspection program to undertake inspections in a more timely manner.

The Prevention Coordinator is responsible for preparing, researching and delivering the following educational programs:

- Risk Watch for Children (for grades K-8);
- Pre-school Fire Safety (for ages 3 and 4);
- Plan To Get Out Alive (for ages 9 to adult);
- What We Do and Fire Safety (for ages 8 – 12);
- Fire Safety for Brownies/Guides;
- Career Day Presentations (for grades 7 and 8);
- Senior Fire Safety for Older Adults; and
- The Arson Prevention Program for Children (TAPP-C).

In addition to the above noted programs, the department assists local non-profit events and organizations when possible by providing an information display, a Pumper with full firefighter crew or Sparky the fire department mascot. Station tours are also available upon request. These opportunities provide an excellent occasion for the department to raise community awareness of the fire department, but they depend on the availability and willingness of department part-time firefighters.

On-shift firefighters assist with the urban smoke alarm initiative. This is a voluntary check of residential smoke alarms carried out between May and October with local partners supporting the initiative by providing new batteries for replacement. A media blitz is done in advance to inform residents that canvassing will be taking place. The Milton newspapers are widely read and a preferred medium for information dissemination. The department should continue to exploit this opportunity for media relations. In 2005/2006 the department

added a rural component to the program using part-time firefighters and monies made available through a provincial grant. This was a successful program, but no more provincial funding is available. Consideration should be given to funding this program, either by a partnership with sponsors, the Town or both. The cost of the additional rural part of the program is in the order of approximately \$5,000.00.

Other Division responsibilities include post-fire investigations (i.e. cause determination, reporting, statistics tracking), alarm follow-ups (on all false alarms to determine cause plus a three step escalation from warnings through to cost recovery) and data analysis. The Division strives to assess incident statistics with a view to focus prevention activities on emerging or recurring problems (e.g. increase in cooking fires or increase in false alarms). Right now this is being done in part by taking time away from training activities.

A priority setting matrix was developed based on risks identified in the 2002 assessment and discussions held with Fire Department staff about existing fire prevention and public education activities. This is consistent with what the Office of the Fire Marshal calls the "Fire Prevention Effectiveness Model". Essentially this is a more comprehensive fire profile and it addresses program selection, development and implementation to address the identified risk. The last part of the model is to evaluate the effectiveness of the programs. **Table I** provides a worksheet for prioritizing Fire Prevention and Public Education efforts and highlights gaps in service. Key items are discussed in more detail below.

Priority	Status		Effectiveness, Goals/Objectives		
Fire Safety Priority List in order of priority	Current fire prevention / public education programs that address the fire safety priority		Do existing programs adequately address minimum FPPA requirements? If No, how should this change?		
	Fire Prevention (Inspection) Activities	Public Education Activities	Y/N	Fire Prevention Inspection Activities	Public Education Activities
1) Children		<ul style="list-style-type: none"> ▪ Involvement in parades, school tours, and use of Sparkie ▪ Station tours ▪ Risk Watch in schools ▪ The Arson Prevention Program for Children (done on request not a program (TAPP-C) ▪ Pre-school Fire Safety Training ▪ Fire Safety Training for Brownies & Guides ▪ New model “Hazard House”(not used to potential) ▪ Fire Safety Trailer (joint with Halton Hills) (new) 	<p>Y</p> <p>Y</p> <p>N</p> <p>N</p> <p>N</p> <p>N</p> <p>Y</p> <p>Y</p>		
2) Seniors	▪ Regular Inspection of Allendale Nursing Home		Y		
		▪ Senior Fire Safety for Older Adults Training	N		▪ Growing senior population requires more programs/ emphasis

Table 1 - Priority Setting for Fire Prevention and Public Education

Priority	Status		Effectiveness, Goals/Objectives		
Fire Safety Priority List in order of priority	Current fire prevention / public education programs that address the fire safety priority		Do existing programs adequately address minimum FPPA requirements? If No, how should this change?		
	Fire Prevention (Inspection) Activities	Public Education Activities	Y/N	Fire Prevention Inspection Activities	Public Education Activities
3) All residents	<ul style="list-style-type: none"> Urban smoke alarm initiative Rural smoke alarm initiative Free home fire safety inspections (by request) Pre-fire planning Post-fire investigations Alarm follow-up Burn permit program Regular inspection of assembly occupancies and selected other occupancies (Milton Hospital and other inspections by complaint or request) 		Y		
			N		
			Y		
			N		
			Y		
			Y		
			Y		
			Y		
			N	<ul style="list-style-type: none"> Establish annual inspection targets for assembly occupancies 	
		<ul style="list-style-type: none"> Dissemination of Public Education Material and other media publications Smoke alarm program Fire Extinguisher Training Plan To Get Out Alive Training (on request) Community Assistance Requests 	Y		
			Y		
			N		
			N		
			Y		

The Division currently offers the Senior Fire Safety program for Older Adults but would benefit from providing additional targeted prevention programs toward the growing senior population for further outreach and to develop partnerships. In Ontario, fire deaths during the 2000-2005 period were predominantly among the senior population (range of 20-40% over 5 years).

The Fire Prevention Division is responsible for the burn permit program. The recent introduction of an expiry date for permits has noticeably increased the workload. Given other responsibilities within the Division there are not sufficient resources to check on locations that were given burn permits.

The Fire Prevention Division is responsible for the inspection of all occupancies. Currently only the institutional occupancies of Milton Hospital and the Maplehurst and Allendale Nursing Home are targeted for annual inspection. All other sites are inspected on a complaint or request basis. There are not sufficient resources to pro-actively inspect the assembly occupancies that should be targeted annually (e.g. apartment buildings, meeting places, restaurants etc.).

It would be highly beneficial to have a staff person assigned to building and fire code enforcement, separate from other prevention activities. This would allow the department to provide a higher standard of assembly occupancy inspections and could potentially reduce some of the Support Services workload by diverting some planning and review activities to qualified prevention staff.

Part of the Prevention Division's responsibilities includes liaising with other agencies, committees, Town departments and other regional prevention resources. Public relations activities more naturally fall within the realm of public education, but resource limitations in the Prevention Division have required this responsibility to be shifted to the Training Division. Other programs such as student coop placement and recruitment would also more naturally lie within the Prevention Division since they relate more closely to public relations.

The department should update its simplified risk assessment periodically. This has the benefit of assisting the department in understanding how the community changes over time and how the department has to change to meet the needs of the community. An update every three – five years would be appropriate.

Best practices would suggest a more inclusive list of assembly occupancies be targeted for pro-active inspections. As the municipality grows, as the building stock changes and as legislation lead the department to a more regular cycle of inspections of different types of buildings, workload will increase. The department should add staff to the Prevention Division to maintain existing programs and to improve its current inspection activities.

As the population over the next 10-15 years grows the inspections required will also have to increase. Dedicated fire prevention inspection staff is needed and future demands will exacerbate that need. Public education has contributed significantly to people's awareness of fire protection. The implementation of programs like the smoke alarm program, fire safety education material and a whole range of other programs targeted at specific groups has had a positive impact. The number of school-age children will put additional demands on public education staff.

The following are the recommendations that flow from the review of the Fire Prevention Division:

8. Inspection of Assembly Occupancies

The Fire Department should establish a target for the pro-active inspection of assembly occupancies (e.g. community meeting places, places of worship). Other than the Allendale Nursing Home and Maplehurst, assembly occupancies are currently inspected on a complaint/ request basis.

9. Additional Public Education Programs for Seniors

One of the fire department's public education priorities is to provide additional public education programs for the senior's population.

10. Public Education Technician

There is a need for assistance with the delivery of public education activities, coordination of medical and coop students, the fire department recruitment program and public relations. The addition of at least one public education technician would allow the department to undertake more activities/programs in this area and assist with distributing the Division workload to allow for recruitment effort that will be required. In the short term, this function could be assigned firefighting duties as part of a "dual-role" scenario until sufficient dedicated firefighters are hired to meet daytime staffing needs.

11. Fire Prevention Inspectors

Current demands and future growth will necessitate the need for an additional Fire Prevention Officers. At a minimum, one should be added as soon as possible, with a second to handle the expected increase workload, in the near future. In the short term, this function could be assigned firefighting duties as part of a "dual-role" scenario until sufficient dedicated firefighters are hired to meet daytime staffing needs.

12. Rural Smoke Alarm Program

Consideration should be given to funding the "rural smoke alarm program" program, either by a partnership with sponsors, the Town or both. The cost of the additional rural part of the program is in the order of approximately \$5,000.

2.1.6 Emergency Operations Division

The Milton Fire Department currently operates out of three fire stations, one housing full-time staff and all housing part-time staff. The centrally located Station 1 (Central Station) houses the Administration Office, Communication Centre, as well as the Fire Prevention and Public Education, Training and Support Services Divisions. Forty-one part-time firefighters make up the bulk of the fire suppression staff at this site.

Station 1 was built in 1978, is of prefab metal construction and fills its purpose fairly adequately. The communication area is small, with only enough room for one person to operate within it. Given the station's layout, direct access to the communications room is possible, which is not ideal. Station 1 has sufficient space at the back of the lot for rapid intervention and extrication training. Its location on Steeles Avenue can sometimes be an issue when Highway 401 incidents occur and diverted traffic causes congestion problems. Such occurrences hinder part-time response to the station. The station is equipped with a generator and radio

tower. The condition of the building is deteriorating and renovations have been postponed due to expectations of a new station being built.

Station 2 was built in 2003. Located in rural Campbellville, it houses part-time firefighters and is a newly constructed structure in very good condition. In the event of an emergency, 21 part-time firefighters respond to emergencies from this station. This station is also shared by Halton Emergency Medical Services and Halton Regional Police Services. Two double station bays are reserved for Fire Department vehicles and a breathing apparatus room is located adjacent to the truck bays. Station 2 features a ladder training area, a rappelling area and a training pond beside the station allowing pumper training evolutions to take place on site.

Station 3 was built in 1982 and is a relatively older building that has been manned by a full-time suppression crew 24 hours a day, 7 days a week since 2002. A full-time complement of 20 firefighters who work in crews of five on rotating shifts and a part-time complement of 21 firefighters respond to emergencies from this station. The building at the time of construction was not envisioned to accommodate full-time firefighters. This station has long been thought to be inadequate and lands have been acquired for its eventual relocation. There is no emergency power at this station.

2.1.6.1 Apparatus

In addition to pumpers and tankers, the Milton Fire Department owns a number of specialized apparatus including a hazardous materials trailer that can be used as a rehabilitation centre during prolonged response (e.g. fire). A number of recent acquisitions have broadened Milton's capabilities, including: a heavy rescue vehicle that carries equipment for hazardous material emergencies, confined space incidents and fires. It also has on-board air bottle filling capacity. The new mobile communications centre is housed within a Special Operations unit. A 100 foot aerial ladder was added to the fleet to address taller and more complex structures within the Town. **Table 2** shows the existing station locations and associated distribution of emergency response apparatus that Milton has access to for intervention in fires and other emergencies. Staffing levels at each of the stations are also shown.

The department has a good fleet replacement plan in place. In general, pumpers are kept in service for ten years before refurbishment is considered which extends useful life another five years. Tankers are run slightly longer and at 16 years are considered for replacement. The current fleet replacement plan has been included as **Appendix A**. The department is currently exploring the potential to track fleet maintenance activities within its data management system.

2.1.6.2 Fire Suppression and Deployment

The Town of Milton has aid agreements in place with many of its neighbouring municipalities in order to protect its 373 square-kilometre land mass and to provide assistance to adjacent areas. Mutual aid plans are developed to allow participating fire departments to request assistance from their neighbouring departments in case of major emergencies. Typically there are no associated fees and agreements are mutually beneficial. A Regional mutual aid plan was finalized and approved by Milton Council last year. Milton's mutual aid agreement with Puslinch was reviewed last year.

Table 2 - Fire Stations and Apparatus		
Station Location	Emergency Response Apparatus	Staffing
Station 1 405 Steeles Avenue East	1 pumper 1 aerial 1 tanker 1 heavy rescue 1 special operations vansupport van 1 rehab unit 1 pickups 1 water supply 1 Hazmat trailer 1 training pumper	Full-time administrative/ management staff 41 part-time firefighters
Station 2 (Campbellville) 2665 Reid Side Road	2 pumpers 1 tanker 1 rescue 1 pick-up	21 part-time firefighters
Station 3 2800 Derry Road	1 pumper 1 tanker 1 rescue van 1 aerial 1 pick-up 1 ATV 1 ATV trailer	20 full-time and 21 part-time firefighters

Fire protection agreements are contracts between municipalities that outline the terms and conditions of the service agreement. They define responsibilities, resources and associated costs, if applicable. An automatic aid agreement generally specifies a fee for service and is meant to augment one department's resources on an as-required basis. In terms of level of service, the responding fire department is an extension of the municipality purchasing the service. Fire protection agreements are in place with Halton Hills, Mississauga, Burlington and Oakville. In general, the agreements in place fulfill their intended purpose. However, the fire protection agreements with Oakville, Halton Hills and Burlington (and the automatic aid agreement for tanker support with Burlington) are somewhat outdated and are scheduled to be reviewed this year.

The fire department maintains the "Superior Tanker Shuttle" accreditation for rural water flow. Dry hydrants and other water sources located throughout the rural area and within some estate lot developments help to reduce distances over which water must be shuttled. The department is in the process of mapping all useable water sources to assist responding firefighters in locating the one nearest to an incident. There are no arrangements in place to ensure maintenance and repair of the cisterns occur. The municipality should investigate the feasibility of developing a process to ensure maintenance and repair occurs. The emergency civic addressing is in use in rural areas to improve emergency response.

The Milton Fire Department generally operates with four firefighters per apparatus on front line equipment. The department has prepared apparatus assignments for the initial response to typical incidents. These assignments enable suppression and communications staff to follow common procedures. Apparatus and staff are assigned an initial deployment scheme while ensuring that reserve capacity is maintained in the event of a simultaneous call.

In 2000, the Office of the Ontario Fire Marshal (OFM) began monitoring the Milton Fire Department as one of 20 municipalities studied. All eligible calls were tracked against the OFM's 10-in-10 guideline, which provides that a force of at least ten firefighters should be assembled on the scene of an urban residential structure fire within ten minutes.

The Fire Department had stopped tracking its success against the OFM 10-in-10 standard in 2004, but has since resumed this practice. The number of "eligible" calls (e.g. structure fires) is limited which makes it difficult to assess performance for a given response standard. A more detailed discussion of emergency response is included in **Section 2.4** (Existing Department Response Coverage) of this report.

The following are the recommendations that flow from the review of the Fire Suppression and Deployment:

13. Maintenance and Repair of the Cisterns

The municipality should investigate the feasibility of developing a process to ensure maintenance and repair occurs.

2.2 DEPARTMENT RESPONSIBILITIES

Fire service responsibilities include the traditional firefighting role, motor vehicle accident, ice, water, confined space and high angle rescues, and initial intervention in hazardous materials incidents. These require special training, equipment and response reactions. In an expanding Town these responsibilities are expected to increase, and future planning should be directed toward meeting this challenge.

The response to medical related emergencies is provided by Halton Region EMS who assumed responsibility for land ambulance services in the region in 2000. The Milton Fire Department responds to medical calls only when the response of an ambulance will be delayed.

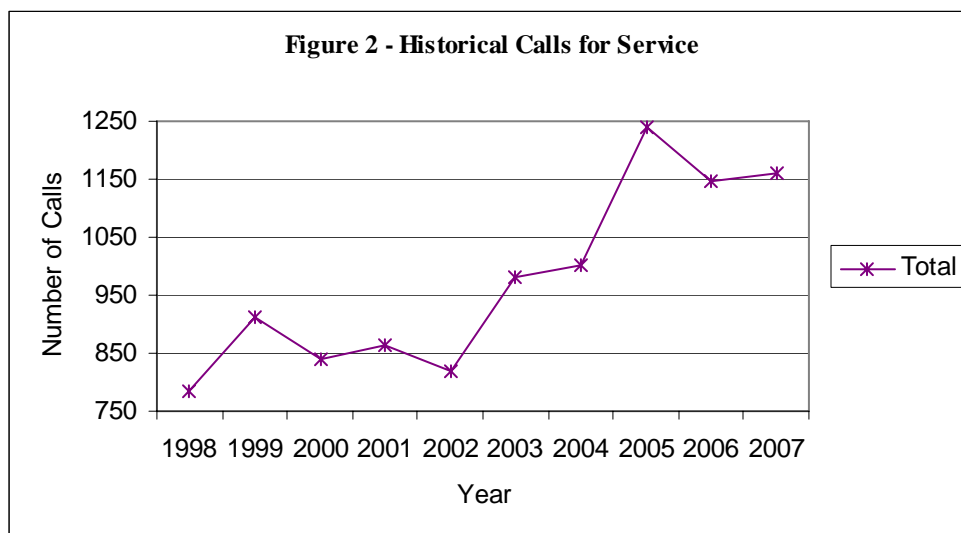
Municipal emergency preparedness is currently coordinated through the Chief Administrative Officer's office and this is not the responsibility of the Fire Department. However, the Fire Department is obviously a major provider of first responder assistance in the case of an incident, so consideration to altering this arrangement could occur if the Department is provided with additional staffing specifically targeted to fulfill the role. Currently the fire department management is not well positioned to deal with a major incident that would require them to assist with staffing-up an "Emergency Operations Centre". Senior staff are required to form part of the "emergency control group" and are also likely to be assigned as the site managers in a major event or at least will likely play a major supporting role in command of the fire departmental response unit. Depending on the complexity of the situation and given vacations, training commitments and other situations that may keep them away from active duty, they may not be able to fulfill all of the roles assigned.

2.3 DEPARTMENT WORKLOAD

There were 1,162 fire department responses in 2007. Of these, over fifty percent were fire-related calls (all fire/smoke incidents that are structural or non-structural, explosions and alarm and other investigations). The remaining calls were other calls (assistance to incidents other than medical (e.g. MTO, police), hazard incidents, mutual aid, motor vehicle accident, and rescue incidents). Unlike many Ontario fire departments, medical calls represented less than 1% of calls because Milton only responds to medical calls when ambulance service response is delayed. It is estimated that the annual call volume would increase by 2000 calls if the Fire Department responded to all medical calls by adopting full tiered response. The dollar value of fire loss was \$2,130,000 for 2007 and \$1,942,000 in 2006.

Table 3 and **Figure 2** present the breakdown of calls for service by year. Given the staffing level in Milton, only one full-time staffed vehicle is available for first response. As a result, Station 3 staff responds to most of the over 1,200 annual calls received. There has not been any hiring of full-time staff since 2002.

Table 3 - Calls for Service	
Year	Total
1998	786
1999	911
2000	838
2001	865
2002	818
2003	982
2004	1,002
2005	1,238
2006	1,148
2007	1,162



2.4 FIRE DEPARTMENT RESPONSE COVERAGE

2.4.1 Performance Measures

The establishment of performance measures and guidelines that affect the staffing response to structural fire calls has been a topic of much debate in the fire protection industry for some time. Since there is no legislative requirement of what performance measure or standard to meet, municipalities are tasked with setting the service level that meets the needs and financial capabilities of their municipality. This historically resulted in a wide range of service levels across Canada and North America. More recently, these standards and guidelines, influenced by best practices, firefighter safety and the insurance industry, have begun to come together in a much narrower range of accepted best practice. This was led by the adoption of a service standard by the authoritative National Fire Protection Association (NFPA). The Office of the Fire Marshal has also published a guideline specifically for Ontario.

There are two main parts to the performance measures:

- First Response - getting there quickly; and
- Depth of Response - getting the appropriate resources there in a timely manner to do the job.

The two most relevant performance measures in some way try to address these two critical components.

2.4.1.1 Fire Marshal's Guidelines

The Office of the Fire Marshal (OFM) is a branch of the Public Safety Division of the Ontario Ministry of Community Safety and Correctional Services. The role of the OFM is to minimize the loss of life and property from fire in Ontario by providing:

- support to municipalities and fire departments across Ontario to meeting the needs of their communities, including public education, fire prevention, firefighting, fire protection, training, and fire investigation;
- leadership within the Ontario Government by advising on standards and legislation relating to fire prevention and protection; and
- recommendations for the provision of adequate levels of fire safety for buildings and premises within Ontario.

As identified in the *Fire Protection and Prevention Act, 1997*, the Office of the Fire Marshal has the power to issue guidelines to municipalities in respect to fire protection services and related matters. The guidelines are to be used by local municipalities to determine the level of fire protection services as it determines may be necessary in accordance with its needs and circumstances. For emergency response, Public Fire Safety Guideline (PFSG) 04-08-12, "Staffing – Single Family Dwellings" recommends the following:

- Minimum of 4 firefighters initially responding;
- Minimum of 10 firefighters within 10 minutes (in an urban setting) for fire attack team choosing either aggressive interior fire suppression or rescue operations for 90% of reported fire emergencies;
- Assembly of the 10 firefighters is calculated from the time the fire department receives the emergency alarm until that fire attack team has arrived at the emergency scene.

Included in the 10 minute response time is:

- “Dispatch time”: Time to receive and dispatch the call (typically 1-2 minutes);
- “Turnout time”: Time required for firefighters to react & prepare to respond (nominally 1 minute for career firefighters, but longer for part-time firefighters); and
- “Travel time”: Actual travel time from the fire station to the incident (typically 7-8 minutes).

The crew assigned to respond to an alarm shall be comprised of the numbers necessary for safe and effective firefighting performance related to the expected firefighting conditions. These shall be determined through risk analysis procedures. The major factors to be considered shall include:

- Public/firefighter risk to life;
- Public/firefighter safety hazard;
- Provisions of safe and effective firefighting performance conditions for firefighters;
- The potential property loss; and
- The nature, configuration, hazards, and internal protection of the properties involved.

This guideline is intended to serve as a level to which small fire departments including part-time forces can aspire. Such a response level is considered insufficient for large urban centres, particularly given the high density and industrial components that present more complex fire problems. A response of four firefighters is widely accepted as the minimum initial response in order to commence limited rescue or firefighting. Ten firefighters are required for aggressive interior fire suppression or for rescue operations, but not both. If both are necessary more than ten firefighters are required.

2.4.1.2 NFPA Standards 1710 and 1720

The NFPA is an international non-profit organization dedicated to reducing the burden of fire and other hazards on society by providing and advocating consensus codes and standards, research, training, and education. The NFPA develops, publishes, and disseminates more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks. The NFPA Standards 1710 and 1720 relate to staffing of firefighting forces on a fire scene and are recognized internationally as authoritative benchmarks. NFPA Standard 1710 applies to substantially career staffed fire services, 1720 to substantially part-time staffed fire departments. There are no specific standards for a composite department, which is what Milton operates. Within the definition, and given the build out of the community and this plan as currently envisioned, the Milton Fire Department would be considered a substantially career staffed department and therefore the 1710 standard would apply, particularly for the urban areas. Obviously, large parts of the municipality are rural today and will be in the future and this has to be taken into account when discussing performance measures.

The National Fire Protection Association formally adopted NFPA 1710 for career fire departments in August 2001. This is significant because now, for the first time, there is an industry standard that deals with service levels and staffing. The standard was developed based on a structure fire for a typical single-family dwelling.

While the standard is not a legislative requirement, it will likely have implications for municipal emergency services across North America. NFPA 1710 includes:

- An initial arriving team of four firefighters within four minutes of travel time, 90 % of the time; and
- A full complement of 14 firefighters (15 if an aerial device is sent) in eight minutes, 90% of the time.

Meeting either one of these standards constitutes meeting the standard. There is no specification of depth of response for major fires or simultaneous fires, nor for types of apparatus that must be sent.

2.4.2 Application to the Current Master Planning Solutions

The NFPA 1710 standard for first response and OFM “10-in-10” performance measures for depth of response were adopted for this Fire Master Plan. While not a legislative requirement, we think it is prudent to measure performance against these and to strive for them as changes are made to the Milton Fire Department. The key for the Town is to monitor progress towards these performance measures as targets. As such, it is desirable to have these as Council adopted performance targets and to report against these targets on a regular basis (at least annually).

The Milton Fire Department already operates with a minimum of four firefighters on its first responding vehicles. The challenge for the department is to position itself to achieve first response within four minutes 90% of the time and to respond with ten firefighters within ten minutes 90% of the time. One of the main reasons for not meeting the first response measure today is the use of part-time firefighters. The turnout time penalty associated with the staff not being in the station affects their ability to respond within the 10 minute window.

Furthermore, the assembly time of part-time firefighters at their station of duty is becoming increasingly challenging due to a number of reasons including, but not limited to:

- Increasing traffic congestion and inconvenient traffic patterns experienced on the way to the stations,
- Changing economic circumstances (i.e. double income families) whereby part-time firefighters may not be able to readily leave their household due to parental duty or other family commitments,
- Inability of part-time staff to leave their regular place of employment (employers becoming more reluctant to lose valuable work or productivity time),
- Increasingly difficult to recruit required numbers of part-time personnel in “rural” station areas,
- Changing demographic whereby part-time firefighting is not attractive to the application target zones.

The depth of response standard for NFPA 1710 requires 15 firefighters arriving on the scene within eight minutes of travel time. This would be an onerous target for Milton to try and achieve. Assembling the required resources can be achieved, but doing so within eight minutes 90% of the time would require significant additional resources. The part-time firefighter of the Town provides that critical depth of response (i.e. beyond first response) capability today and will continue to do so for quite some time in an efficient and cost effective manner.

A number of staffing options were evaluated to move the department towards achieving the performance measure adopted for this study. The key will be to monitor progress on a regular basis. Changes could be made to the implementation schedule as performance and need dictates. **Table 4** compares the different performance measures, including the staffing requirements. The bolded measures were adopted for this study and are what is being recommended be adopted by Council as the targets for the Town.

Table 4 - Alternative Industry Response Standards and Guidelines

Performance Measure	NFPA 1710	OFM 10-in-10
First Response	<i>First responding vehicle with a staff of four in 4 minutes of travel time, 90% of the time</i>	First responding vehicle with a staff of four
Depth of Response	Staff of 15 in 8 minutes of travel time, 90% of the time	<i>Staff of 10-in-10 minutes of travel time, 90% of the time (typically leaves 7 to 8 minutes of travel time)</i>

14. Council Adopted Performance Measures

Council should consider the following Performance Measures for the Fire Department and have them report against these Performance Measures on a regular basis (at least annually):

- The first responding vehicle with a staff of four should arrive within four minutes of travel time, 90% of the time; and
- The arrival of ten firefighters within ten minutes of response time, 90% of the time (typically leaves 7 to 8 minutes of travel time).

2.4.3 Assessment of Response Coverage

This section summarizes the results of the assessment of existing response coverage. The assessment is based on the travel time component of the two industry performance measures. Included is a brief description of the methodology employed to derive the results, including the modelling process.

2.4.3.1 Methodology

The study methodology for this report has relied heavily on the use of a computer program called FireOpt. This section provides a brief outline of the scope and methodology used, in order to provide insight into the modelling procedures adopted for this study. FireOpt is a computer program, written to assist decision-making in relation to fire station siting. FireOpt is a valuable tool to assist the Fire Chief, Administrators, and Council to make an informed decision regarding fire suppression response capabilities.

Fire Opt essentially requires the following input:

- The definition of “fire demand” zones (i.e. areas needing fire protection);
- The quantification of the fire “risk” in each fire demand zone;
- Description of the road network for the urban area or region to be analyzed; and
- The locations of existing and potential fire stations.

FireOpt then computes several assessments:

- The best route between each fire station and all fire demand zones;
- The response time between all fire stations and all fire demand zones;

- For each fire demand zone, the best sequence of fire stations to serve that zone;
- The number and proportion of first-response calls likely to be handled by each fire station; and
- The distribution of response time coverage provided to an area by each fire station scenario.

2.4.3.2 Input of Fire Demand Zones and Fire Stations

For analysis purposes it was necessary to subdivide the municipality into small units, called “Fire Demand Zones”. These zones represent potential fire locations, and have an inherent risk associated with the land use and building occupancy. Both fire demand zones and fire stations are represented as point locations called “centroids”, in relation to the road network. There were 103 fire demand zones created to represent the existing condition in Milton and they are illustrated in **Figure 3**. Planning and land use data provided by the Town of Milton completed the fire demand zones picture for future conditions with a total of 205 zones, illustrated in **Figure 4**.

Figure 3 - Existing Fire Risk Zone Classes

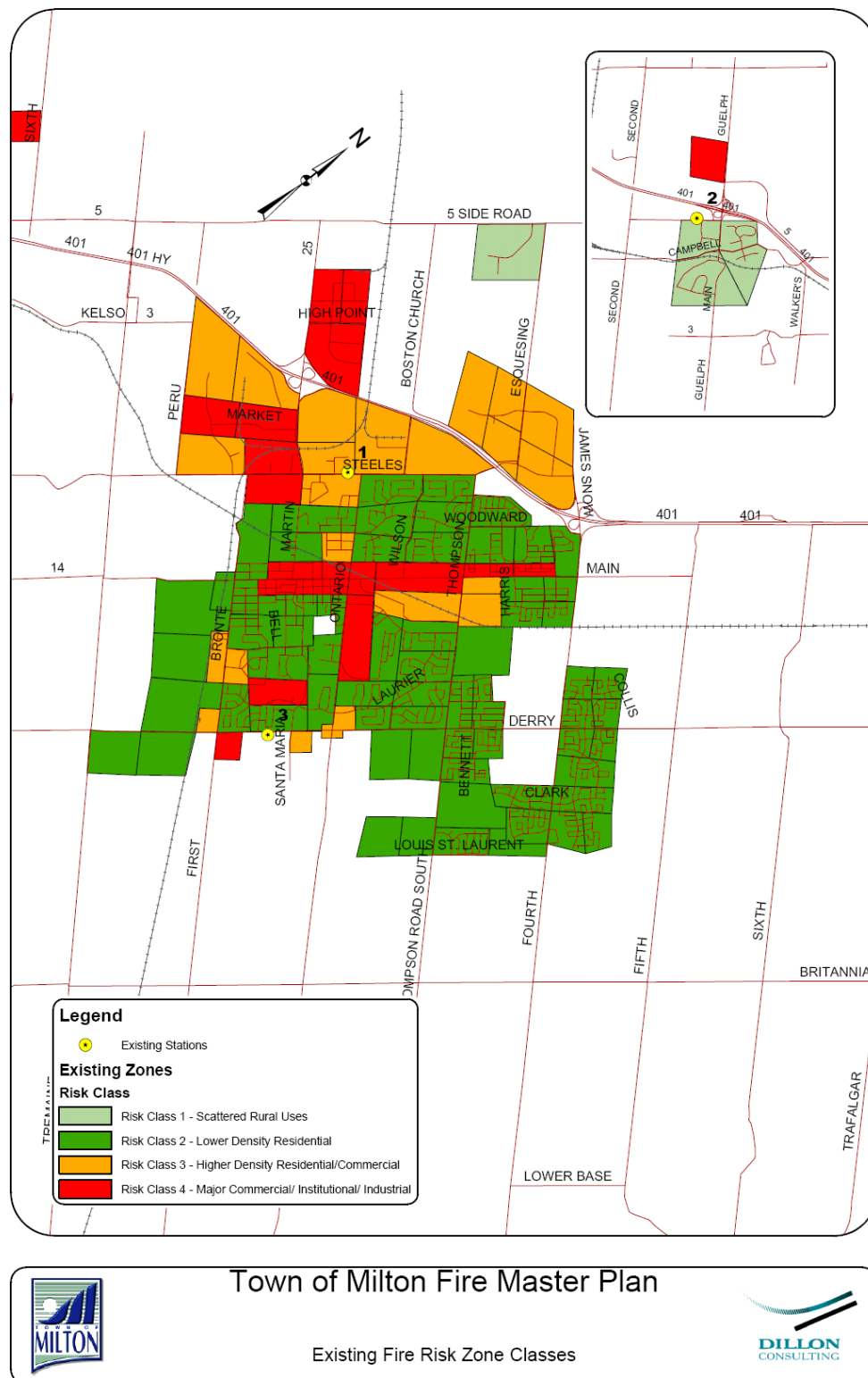
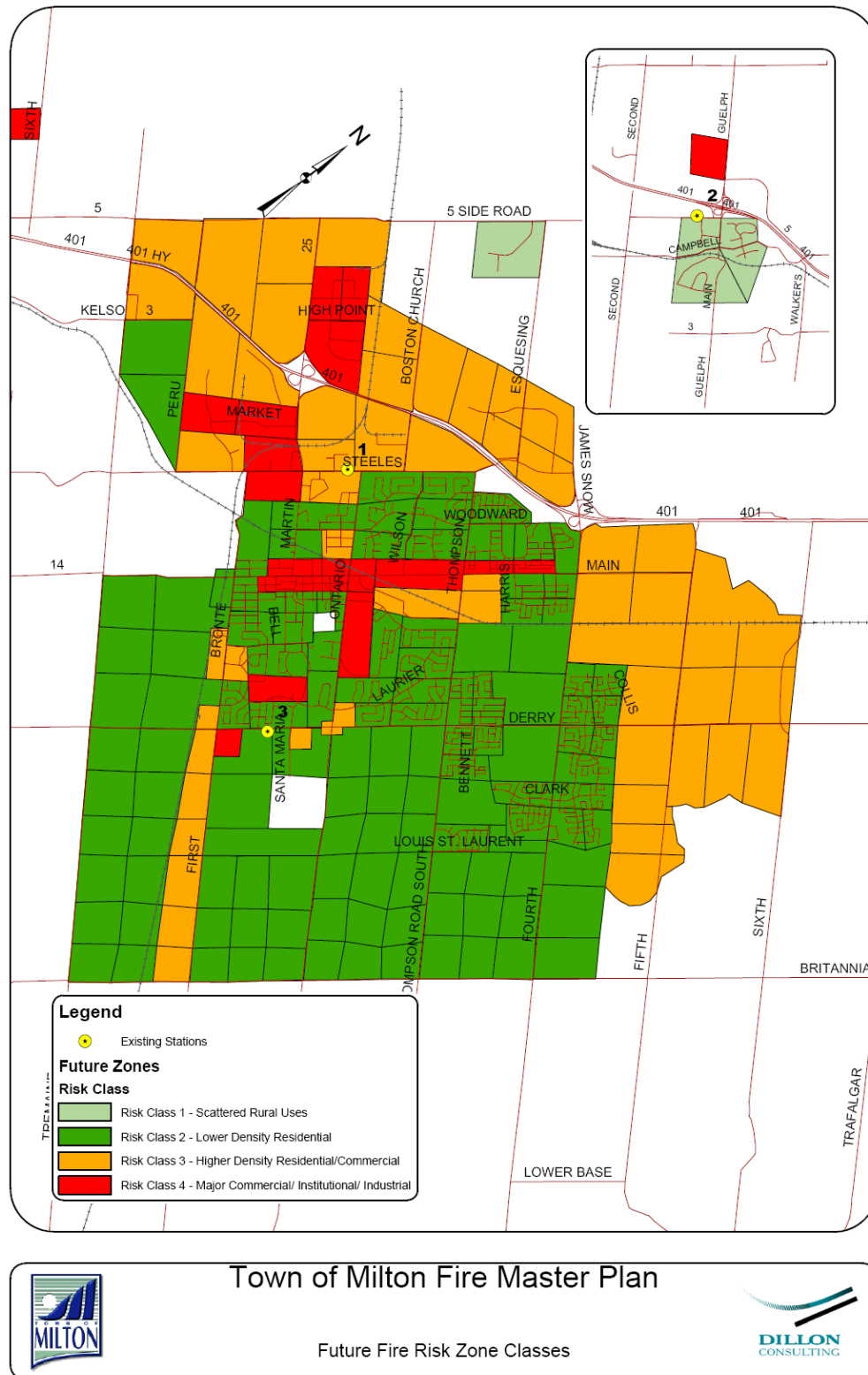


Figure 4 - Future Fire Risk Zone Classes



2.4.3.3 Risk Assessment Method

The assessment of fire risk for the purposes of this study was based on an established system of risk classification. It is substantially compatible with the measures used across Canada by Fire Underwriters Survey for the fire insurance industry, and in keeping with methods accepted throughout North America. The system is based upon building types, construction and occupancy, with an assessment of the rate of flow of fire department hose streams considered necessary to confine and gain control of their potential fires. This assessment of flow rates is undertaken in accordance with similarly accepted standards of Fire Underwriters Survey and other authorities. Exceptional life hazards are also considered. Numbers and promptness of response for fire apparatus and personnel are derived from these criteria. The Town is divided into small areas or neighbourhoods for classification in 'Risk Classes' as briefly described below:

Risk Class 1 - This is for usually outlying, rural or semi-rural areas where small buildings are prevalent and there is generally wide separation, so there is little exposure hazard between them. They are mainly of 2400 square feet area or less and detached at least 100 feet. Fire control for an advanced fire is expected to require two or three standard fire streams or 400 to 600 Imperial gallons per minute (g.p.m.).

Risk Class 2 - These zones cover most modern one and two storey, one and two family residential home subdivisions having good spatial or structure fire separations. Fire control is expected to require deployment of up to 1000 g.p.m. in streams for an advanced fire. Small commercial and other buildings of similar risk are included in this class.

Risk Class 3 - More congested residential occupancies requiring more substantial firefighting forces, including many townhouses, small apartment buildings and commercial establishments are included among Class 3 risks. Larger water applications for fire control, together with more firefighters promptly on the scene are required. Fire flow estimates range up to 2800 g.p.m. Very large buildings, including high-rise types, may fall into this category of modern fire resistive construction and automatic sprinkler protected.

Risk Class 4 - Included in Risk Class 4 are most major commercial, institutional and industrial occupancies, shopping centres and apartment buildings without strong internal protective features. Substantial stocks of combustible materials and flammable internal finishes contribute to classification in this category. Fire flow estimates range up to 4200 g.p.m.

Risk Classes 5 and 6 - These are applied to very large or hazardous commercial and industrial properties, generally featuring large undivided, unsprinklered internal spaces and large quantities of combustibles. Or they may be multi-storey buildings of combustible construction with weak internal protection or an inter-building conflagration risk. Fire flow calculations may be 5000 g.p.m. or higher.

In classifying the small areas, only the predominate risk is captured. It is possible to have individual uses that would be rated as a higher or lower risk than the predominate risk assigned to the area.

2.4.3.4 Neighbourhood Risk Survey

The Town of Milton is physically made up of a variety of structural community groupings having extensive open farming country and some forested areas between them. The core built up area of Milton is rapidly growing outward north, south, east and west. Residential districts of the urban area are largely made up of typical detached-frame dwellings comprising Class 2 risks and ranging in age. Senior apartment and condominium properties, particularly Allendale Nursing Home and Halton Region Apartments, warrant Class 4 designation. Milton District Hospital, located near the corner of Derry Road and First Line also warrants Class 4 designation.

In 2006, Milton's industrial area included approximately 77 factories/businesses and 904 businesses, including mercantile occupancies through-out the town. Several "big box" stores are located on Steeles Avenue, running east from Bronte Street to Ontario Street. Industrial development is mostly concentrated north of Steeles Avenue up to Highway 401, between Peru Road and James Snow Parkway, in addition to some development north of Highway 401. Automatic fire sprinkler protection is common in the larger industrial and commercial properties. Commercial, industrial and institutional areas are designated as Class 3 risk, except where safety concerns due to high hazard buildings and/or significant economic or social impacts warrant Class 4.

One of the main commercial areas lies along Main Street, which consists of residential occupancies over mercantile occupancies. Automatic sprinkler protection is not common. In addition, there are town houses built as combustible construction, with limited access and no or limited fire breaks between units. Because of the structural combustibility and inter-exposure, with life hazard in residential upper floors, most of the Main Street is rated Risk Class 4.

Small communities scattered about the Town's territory are rated in Class 2, having mainly small, well-detached structures. These lie largely in Campbellville, in addition to some residential occupancies north of Regional Road 15 between First and Fourth Line, and a smaller residential area located near the corner of Side Road 5 and Esquesing Line.

Rural areas comprise extensive farmlands and forested areas, including the Niagara Escarpment, in which the Fire Department responds. The part-time fire crews cover these rural areas with back-up assistance from the urban stations.

Mainline railways and highways running through the city have been considered within the road network. In general, at-grade rail crossings have been assumed to be dead-end roads. This reflects department response schemes and represents the worst-case scenario, whereby a passing train effectively blocks roadway access.

2.4.3.5 Road Network Representation

Since FireOpt simulates the "real" road network system, it is necessary to supply it with precise details of all roads that might be used by fire vehicles. A digital copy of the Town's GIS database was provided to us to extract the relevant base road network information. Roads are described in terms of "links", which are stretches of road between intersections, called "nodes". For each link, it is necessary to define any two of speed, distance and travel time. FireOpt takes this information and creates a representation of the road network system of the area.

Through the FireOpt modelling procedure, the concept of minimizing “response time” to fires is properly assumed to be of utmost importance. It is important to clarify exactly what is meant by response time. Rapid extinguishment of a fire is naturally aided by minimizing the time for any of the activities in the sequence of events in a fire incident. However, the only activity whose time depends on the location of the fire station is the travel component (i.e., the elapsed time from leaving the station to arriving at the scene of the fire).

The FireOpt model therefore attempts to simulate only the travel time, and this is taken throughout as synonymous with “response time”. Appropriate dispatch, turnout, and fire scene deployment times for the Department can be added to evaluate performance.

2.4.3.6 Distances and Speeds

In order to estimate the travel time between points on the road network, each link must be assigned a distance and a speed of travel. The speed of travel in the case of an emergency vehicle is intended to be the average speed a firefighting vehicle can achieve travelling along the specific link. This speed will vary with the time of day, day of week, and even the season of the year. The important thing is that the speed is assigned consistently, in relation to the posted speed, to all network links, so that the relative merits of various fire station combinations will be constant. The posted speed limit and the link distances, as included in the planning network data provided by the Town were adopted as the starting point for the analysis.

The accuracy of the response times corresponding to the routes was then checked. Roads were broken into speed classes based on their speed limit and class of roadway. Adjustments were then made to reflect actual emergency calls. A fairly limited set of 2005 response times was available for eligible 10-in-10 emergency calls from the Milton Fire Department. Calibration was initially carried out using this limited data but found to be overly optimistic.

Generally, fire apparatus travel at a speed that is lower than the posted speed, factoring in lost time at traffic controls and at turns. In order to produce modeled times comparable to actual travel times, it was determined that most posted speeds in the network should be adjusted to produce modeled times comparable to actual times. It was deemed more appropriate to use calibration adjustments consistent with those used in similar municipalities, instead of relying on the limited data for Milton emergency calls. **Table 5** shows the original and calibrated speeds for the road network.

Table 5 - Network Calibration		
Speed Limit (km/h)	Adjustment (%)	Resultant Speed of Travel (km/h)
40 (local roads; ramps)	-20	32
50 (collectors; arterials)	-15	43
60 (collectors; arterials)	0	60
70 (arterials)	0	70
80 (arterials)	0	80
100 (freeway)	0	100

These calibrations are important, as the computerized network model forms the basis for assessing fire protection deficiencies, and for enabling alternate scenarios to be examined. Having calibrated the response times, a matrix of response times between all stations and all fire demand zones in the network was produced using FireOpt. This matrix provides the basis for analysis of the adequacy of the current fire station location configuration.

2.4.3.7 Analytic Results

This section documents the results of the analysis for existing “do-nothing” condition, the future “do-nothing” condition as well as a range of other alternative station location scenarios. In undertaking the analyses, a number of station locations, station numbers, crew variations and staffing scenarios were evaluated. The most promising and practical of these options are documented in this report. The options include:

- The addition of fire crews;
- The addition of fire stations;
- The relocation of fire stations; and
- The use of different staffing scenarios.

The assessment for the existing condition is based on staffing levels as they are today. Coverage for the first response criteria under this scenario is expected to be quite low, given the number of career crews operating within the municipality, the size of the urban area and the turnout time required for the part-time crews. Depth of response coverage is expected to be adequate in the urban area but low in the rural areas.

Scenario 1 – Existing Conditions

This option is based on staffing levels as they are today and can be described as the base case or existing scenario. The road network and fire demand zones reflect the current conditions. The scenario was tested to evaluate the coverage that exists with the current fire suppression resources. Stations 1 and 2 currently have a four minute turnout time and no crew present, while Station 3 has no turnout time and a crew of four firefighters present. The three existing stations result in 42.2% coverage for the NFPA First Response standard and 37.9% for the OFM 10 in-10 Depth of Coverage performance measure, respectively. ***Exhibit 1*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM’s 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.

Scenario 2 – 2010 Conditions

This scenario evaluates the coverage that would result in 2010 if currently approved changes were made to the existing fire suppression resources and community growth were to continue as forecasted. This includes the construction of a fourth station near the intersection of James Snow Parkway and Waldie Avenue, to be staffed by a full-time crew of four firefighters. All three existing stations would operate in the same manner as in Scenario 1. This would result in 58.7% coverage for the NFPA First Response standard and 31.8% for the OFM 10-in-10 Depth of Coverage performance measure, respectively. ***Exhibit 2*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM’s 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.

Scenario 3 – Future Do Nothing

This scenario evaluates the coverage that would result in the future if no changes were made to the 2010 fire suppression resources and community growth were to continue as forecasted. The four stations would result in 63.1% coverage for the NFPA First Response standard and 21.8% for the OFM 10-in-10 Depth of Coverage performance measure, respectively. ***Exhibit 3*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM’s 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.

Scenario 4 – Keep Stations 1, 2 & 4 Locations Status Quo, Relocate Station 3, Optimize 1 Urban Station

This scenario evaluates the coverage resulting from keeping Stations 1 and 2 in their current locations, keeping future Station 4 at the intersection of James Snow Parkway and Waldie Avenue, relocating Station 3 to the intersection of Bronte Road and Derry Road, and optimally locating one additional station in the urban area. All urban stations (i.e. Stations 1, 3, 4 and 5) are assumed to have four crew members available. Station 2 would be the only station with an assigned turnout time “penalty”. This would result in 89.3% coverage for the NFPA First Response standard and 88.8% for the OFM 10-in-10 Depth of Coverage performance measure, respectively. ***Exhibit 4*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM’s 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.

Scenario 1 – Existing Conditions

This option is based on staffing levels as they are today and can be described as the base case or existing scenario. Stations 1 and 2 currently have a four minute turnout time and no crew present, while Station 3 has no turnout time and a crew of four firefighters present. The three existing stations result in 42.2% coverage for the NFPA First Response standard and 37.9% for the OFM 10 in-10 Depth of Coverage performance measure, respectively. ***Exhibit 1*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM’s 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.



Exhibit 1



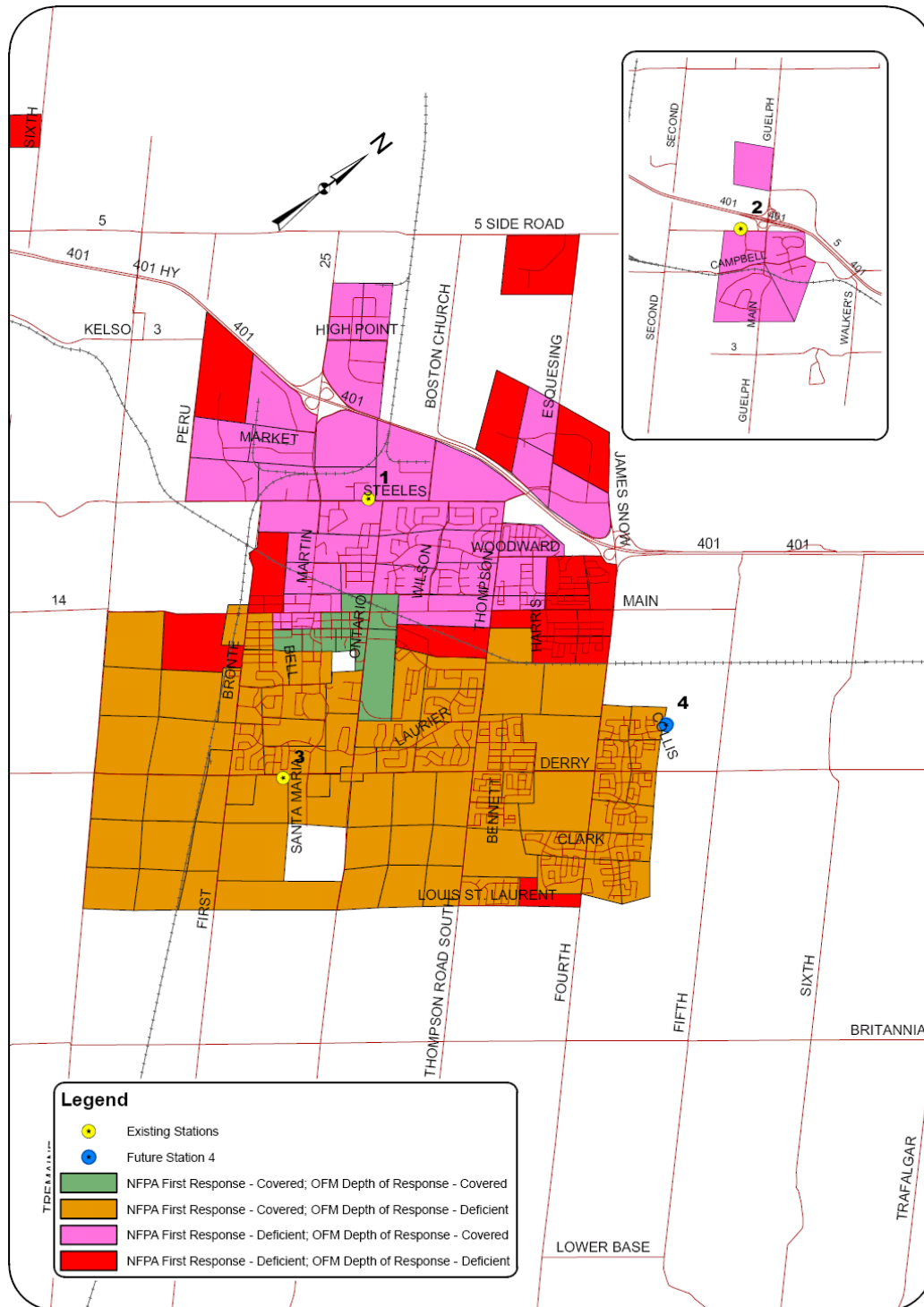
DILLON
CONSULTING



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CONSULTING

Scenario 2 – 2010 Conditions

This scenario evaluates the coverage that would result in 2010 if currently approved changes were made to the existing fire suppression resources and community growth were to continue as forecasted. This includes the construction of a fourth station near the intersection of James Snow Parkway and Waldie Avenue, to be staffed by a full-time crew of four firefighters. All three existing stations would operate in the same manner as in Scenario 1. This would result in 58.7% coverage for the NFPA First Response standard and 31.8% for the OFM 10-in-10 Depth of Coverage performance measure, respectively. ***Exhibit 2*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM's 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.



Town of Milton Fire Master Plan

Exhibit 2

Scenario 2 - 2010 Conditions

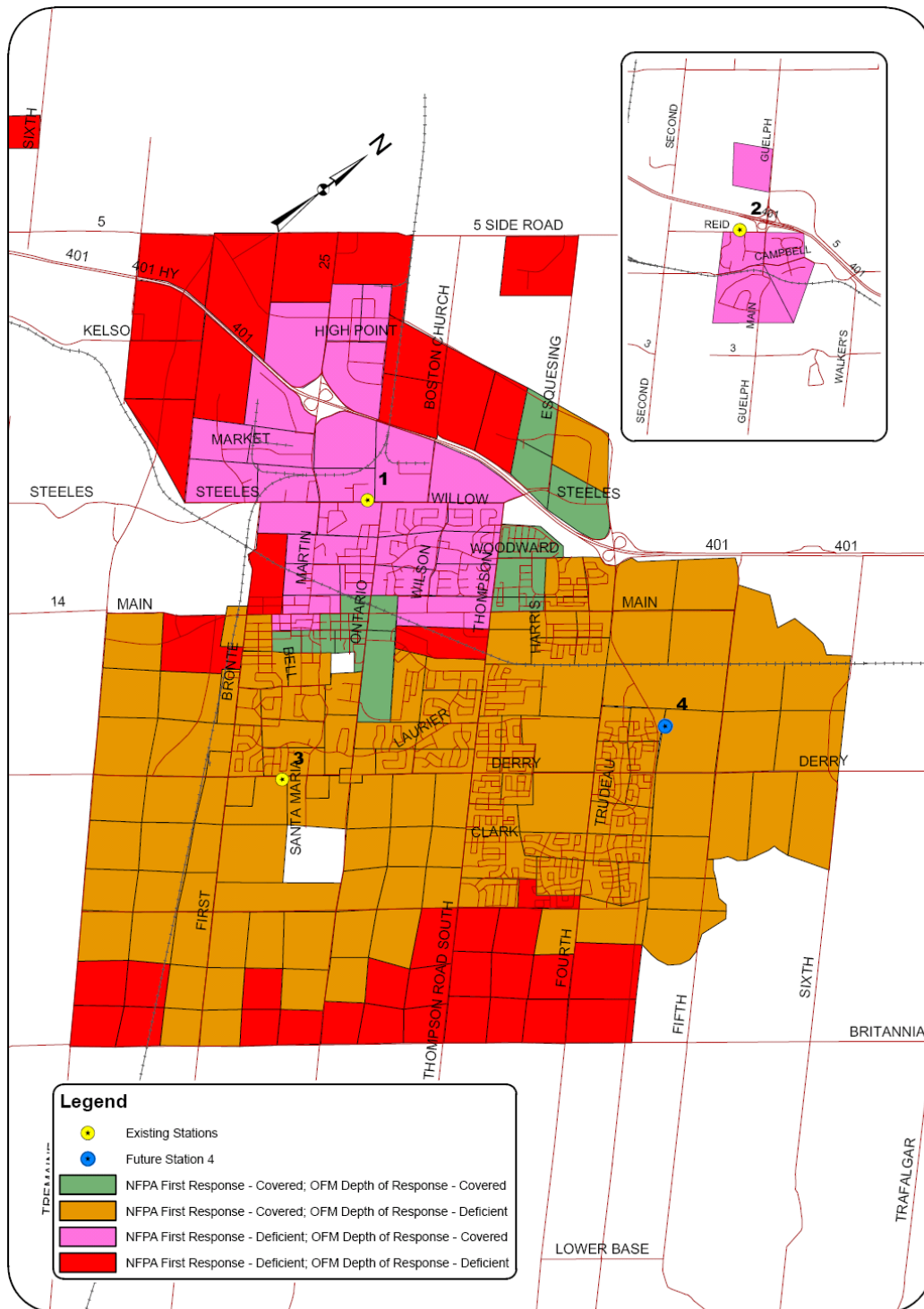
59% NFPA 1710 First Response (4 firefighters in 4 minutes)

32% OFM's 10 in 10 (10 firefighters in 10 minutes)



Scenario 3 – Future Do Nothing

This scenario evaluates the coverage that would result in the future if no changes were made to the 2010 fire suppression resources and community growth were to continue as forecasted. The four stations would result in 63.1% coverage for the NFPA First Response standard and 21.8% for the OFM 10-in-10 Depth of Coverage performance measure, respectively. ***Exhibit 3*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM’s 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.



Town of Milton Fire Master Plan

Exhibit 3

Scenario 3 - Future Do Nothing

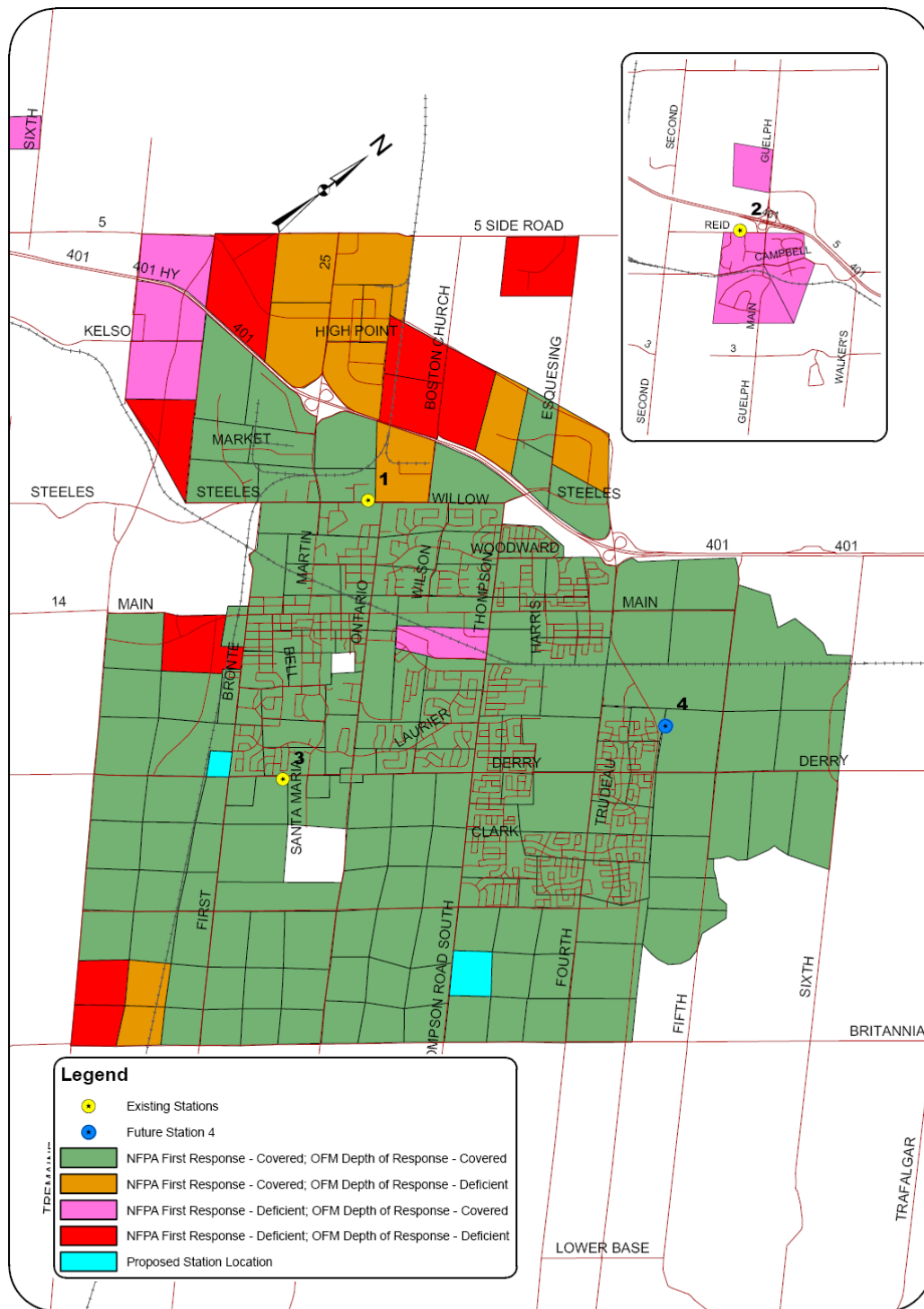
63% NFPA 1710 First Response (4 firefighters in 4 minutes)

22% OFM's 10 in 10 (10 firefighters in 10 minutes)



Scenario 4 – Keep Stations 1, 2 & 4 Locations Status Quo, Relocate Station 3, Optimize 1 Urban Station

This scenario evaluates the coverage resulting from keeping Stations 1 and 2 in their current locations, keeping future Station 4 at the intersection of James Snow Parkway and Waldie Avenue, relocating Station 3 to the intersection of Bronte Road and Derry Road, and optimally locating one additional station in the urban area. All urban stations (i.e. Stations 1, 3, 4 and 5) are assumed to have four crew members available. Station 2 would be the only station with an assigned turnout time “penalty”. This would result in 89.3% coverage for the NFPA First Response standard and 88.8% for the OFM 10-in-10 Depth of Coverage performance measure, respectively. ***Exhibit 4*** (NFPA 1710 First Response – 4 firefighters in 4 minutes and OFM’s 10 in 10 – 10 firefighters in 10 minutes) illustrates the results of the analyses.



Town of Milton Fire Master Plan

Exhibit 4

Scenario 4 - Relocated Station 3, Optimized Station 5
89% NFPA 1710 First Response (4 firefighters in 4 minutes)
89% OFM's 10 in 10 (10 firefighters in 10 minutes)



Summary

Scenario 4, which includes maintaining Stations 1 and 2 in their current locations, relocating Station 3, and optimally locating a new urban station, demonstrated the best overall results, with 89.3% coverage for the NFPA First Response standard and 88.8% coverage for the OFM 10-in-10 Depth of Response performance measure, respectively.

Table 6 represents a summary of response coverage results for the assessed scenarios.

Table 6 - Response Coverage Summary Table					
Scenario	Year	Description	Total Number of Stations	NFPA 1710 – 4 min 4 FF 90%	OFM 10-in-10 10 FF 90%
1	Base	Existing (2008)	1 Rural, 2 Urban	42.2%	37.9%
2	2010	2010 Conditions	1 Rural, 3 Urban	58.7%	31.9%
3	2016	Future Do-Nothing	1 Rural, 3 Urban	63.1%	21.8%
4	2016	Relocated Station 3, Optimized Location for 1 Additional Urban Station	1 Rural, 4 Urban	89.3%	88.8%

The analyses undertaken in this Fire Master Plan were based on the policy assumptions included in the Town's approved Official Plan. It represents the best information of the expected development direction in the municipality.

Additional staffing resources are required to progress from the existing three-station configuration to an ultimate five-station configuration. Typically, in order to provide a minimum coverage of four firefighters around the clock twenty firefighters must be hired. Given that Milton only has one full-time staffed station, providing the same coverage in three additional urban stations would require hiring additional firefighters over the course of the next five to seven years (depending on the pace of development).

Ideally, the Fire Department operates with a complement of eighty part-time firefighters and three district chiefs. This staffing level has suffered through attrition, but it is expected that the current pool of part-time firefighters would be an ideal source for staffing a new full-time station. Milton's part-time firefighters are regularly "hired away" by other fire departments, given their high level of competence. The move to more career firefighters does not eliminate the need for part-time firefighters in Milton. The part-time firefighters provide a critical resource to help meet the depth of response needs in the urban area and will continue to do so for quite some time. In addition, they will continue to be the main first responder in many rural parts of the municipality and they play a critical role when simultaneous calls occur or in the case of major incident.

Additional supervisory staff will be required to manage a full-time force of 80 full-time firefighters within four urban stations. As such, creating a position of Platoon Chief (Duty Officer / Chief Officer) will also be required for each shift (four in total), to manage the increased staffing. Fire Department management will have to monitor workload for shift Captains and may need to introduce a District Chief position when appropriate.

The introduction of full-time firefighters in all of the urban stations will take some time to implement. In the interim period a number of technician positions must be filled to provide the Town of Milton with the staff resources to deliver an appropriate level of fire protection services. The fire department currently relies on part-time firefighter response for initial response purposes and to provide adequate strength in numbers. Daytime hours are the most difficult to cover since part-time firefighters often have primary employment demands. As a supplement to the full-time suppression staff and the part-time firefighters, fire department technicians could fulfill a “dual role” as daytime operations staff. This will provide some added full-time depth during those times of the day that are tougher to staff with part-time firefighters. It is possible that they will not be needed to perform this role when the full complement of career staff has been hired. By that point in time, demands to perform their assigned roles will keep them more than occupied.

15. Plan New Urban Stations

The station location exercise clearly established a future need for four urban fire stations, in addition to the Campbellville part-time station (for a total of five stations). This is generally consistent with the findings of the previous station location study. The Development Charge (DC) Background Study included the capital costs for building two additional fire stations.

Additional funds will have to be secured in order to relocate one existing station. In order to achieve optimal coverage of the existing and future built up areas, Station 3 will have to be relocated and two new stations will have to be built. Appropriate accommodations for full-time staff should be factored into any new station construction (i.e. 7/24/365 shifts). Stations 1 and 3 do not currently have adequate accommodations.

There is a need for adequate space for carrying out training evolutions. Funds for a training structure were incorporated into the \$5.7 Million cost for two stations in the DC study. The current layout at the Steeles Avenue station (Station 1) is limited for communication functions. When this station is renovated, or another urban station is built, the space allocation for communications should be increased.

16. Add Three Complete Full-Time Crews

In order to staff the four urban stations with full-time staff on a 24 hour, seven day a week basis, three full-time crews need to be added over the course the plan. This requires hiring 20 firefighters per crew to regularly staff each station with four firefighters. The total requirement would be 60 firefighters over the course of implementing the plan.

The Insurance Advisory Organization who administers the Fire Underwriters Survey recommends one full-time firefighter for every 15,000 per capita population.

17. Platoon Chief Position (Chief Officers)

The addition of 60 full-time firefighters within the next 7 years will present the need for additional on-shift management support. It is recommended that the position of platoon chief be created to assist with day to day management of firefighting staff within all four urban stations. One Platoon Chief for each platoon will be required for a total of four. One of the new stations should provide accommodation for the platoon chiefs.

21. Interim Operating Model

A number of technician positions must be filled to provide the Town of Milton with the staff resources to deliver an appropriate level of fire protection services. The fire department currently relies on part-time firefighter response for initial response purposes in some areas and to provide adequate strength in numbers. Daytime hours are the most difficult to cover since part-time firefighters often have primary employment demands. An interim operating model for fire suppression would see fire department technicians fulfilling a “dual role” as daytime operations staff.

2.5 PAST AND RECENT INITIATIVES BY FIRE DEPARTMENT

The Town of Milton has experienced tremendous growth over the last five years. In the recent past, the fire department has taken some steps deal with this growth and/or to improve internal operations. More effort will be needed in the coming months and years in order to adequately prepare for future challenges.

Some of the past and recent initiatives undertaken by the fire department include:

- Undertaking a Fire Master Plan in 1998;
- Undertaking a Simplified Risk Assessment in 2002;
- Successfully completing the Municipal Fire Protection Information Survey;
- Implementing full-time staffing at Station 3;
- Completing a station location assessment in 2004;
- Developing and implementing a Smoke Alarm Awareness Program;
- Introducing civic addressing in rural areas;
- Implementing records management software and adapting it to different Divisions;
- Introducing a one-year expiry for burn permits;
- Acquiring a “hazard house” fire safety trailer for public education;
- Updated agreements for mutual aid; and
- Modernized the fleet.

2.6 CURRENT PLANS AND FUTURE INITIATIVES

This Fire Master Plan provides a good assessment of the many programs and activities delivered by the Milton Fire Department and gives insight into some of the challenges faced. The following is a summary of the recommendations contained within this master plan that will, if undertaken, position the Milton Fire Department to appreciably meet the intent of the OFM “10 in 10” response guideline and provide the necessary support functions to enable the department to meet the fire protection needs of a growing community.

1. Senior Officer Development (Section 2.1.1)

The evolution and growth of the composite department to one that has an increasingly reliance on career firefighters will require emphasis on succession planning and senior officer development. The department should be proactive in managing this change.

2. Full-time Administrative Support Position (Section 2.1.2)

In order to provide sufficient support to address the increased day-to-day functions of the Division and the clerical support for a growing department the 0.4 FTE (for six months) position should be expanded to full-time.

3. Additional Space for Communications (Section 2.1.3)

The current layout at the Steeles Avenue station is limited for communication functions. When a new station is built the space allocation for communications should be increased.

4. Computer Aided Dispatch System (Section 2.1.3)

The department has been working on the implementation of a Computer Aided Dispatch (CAD) system for more than one year. The finished product will be integrated with the department's records management software. The system is expected to improve quality control for call tracking. Mobile data terminal are planned to be used in conjunction with the CAD system.

5. CAD/FDM Analyst (Section 2.1.3)

The ongoing maintenance and support of the Computer Aided Dispatch System warrants the addition of an Analyst to help support the GIS and CAD functions for the fire department. In addition to day-to-day activities, the Analyst would also participate in the review of critical mapping, infrastructure and other Town programming conducive with the implementation of new CAD system. These duties include evaluation and assisting with the migration to more effective Department and Corporate use of GIS and other new technology. The department has been working with other Town departments on the use of GIS to streamline department activities in the areas of Fire Prevention (inspection activities, pre-fire planning, station location testing, water-source mapping, etc.).

6. Additional Space for Training Activities (Section 2.1.4)

The current stations do not have sufficient space to carry out training activities. Proper training facilities are required and must include additional space for indoor and outdoor training activities.

7. Explore Apparatus Maintenance Options (Section 2.1.4)

A more comprehensive review of departmental apparatus and equipment maintenance issues should be undertaken with a view to establishing inspection, preventative maintenance and routine/emergency repair options. As the department continues to evolve and expand, the need for a dedicated fleet and equipment asset protection program becomes more critical. A total of thirteen additional vehicles were identified within the DC study at a cost of \$3.8 Million.

8. Inspection of Assembly Occupancies (Section 2.1.5)

The fire department should establish a target for the pro-active inspection of assembly occupancies (e.g. community meeting places, places of worship). Other than the Allendale Nursing Home and Maplehurst, assembly occupancies are currently inspected on a complaint/ request basis.

9. Additional Public Education Programs for Seniors (Section 2.1.5)

One of the fire department's public education priorities is to provide additional public education programs for the senior's population.

10. Public Education Technician (Section 2.1.5)

There is a need for assistance with the delivery of public education activities, coordination of medical and coop students, the fire department recruitment program and public relations. The addition of at least one

public education technician would allow the department to undertake more activities/programs in this area and assist with distributing the Division workload to allow for recruitment effort that will be required. In the short term, this function could be assigned firefighting duties as part of a “dual-role” scenario until sufficient dedicated firefighters are hired to meet daytime staffing needs.

11. Fire Prevention Inspectors (Section 2.1.5)

Current demands and future growth will necessitate the need for an additional Fire Prevention Officers. At a minimum, one should be added as soon as possible, with a second to handle the expected increase workload, in the near future. In the short term, this function could be assigned firefighting duties as part of a “dual-role” scenario until sufficient dedicated firefighters are hired to meet daytime staffing needs.

The Insurance Advisory Organization who administers the Fire Underwriters Survey recommends one Full-time Fire Inspector for every 15,000 per capita population.

12. Rural Smoke Alarm Program (Section 2.1.5)

Consideration should be given to funding the “rural smoke alarm program” program, either by a partnership with sponsors, the Town or both. The cost of the additional rural part of the program is in the order of approximately \$5,000.

13. Maintenance and Repair of the Cisterns (Section 2.1.6.2)

The municipality should investigate the feasibility of developing a process to ensure maintenance and repair occurs.

14. Council Adopted Performance Measures (Section 2.4.2)

Council should adopt the following performance measures for the Fire Department and have them report against these performance measures on a regular basis (at least annually):

- *The first responding vehicle with a staff of four should arrive within four minutes of travel time, 90% of the time; and*
- *The arrival of ten firefighters within ten minutes of response time, 90% of the time (typically leaves 7 to 8 minutes of travel time).*

15. Plan New Urban Stations (Section 2.4.3.7)

The station location exercise clearly established a future need for four urban fire stations, in addition to the Campbellville part-time station (for a total of five stations). This is generally consistent with the findings of the previous station location study. The Development Charge (DC) Background Study included the capital costs for building two additional fire stations.

Additional funds will have to be secured in order to relocate one existing station. In order to achieve optimal coverage of the existing and future built up areas Station 3 will have to be relocated and two new stations will have to be built. Appropriate accommodations for full-time staff should be factored into any new station construction (i.e. overnight or 24-hour shifts). Stations 1 and 3 do not currently have adequate accommodations.

There is a need for adequate space for carrying out training evolutions. Funds for a training structure were incorporated into the \$5.7 Million cost for two stations in the DC study. The current layout at the Steeles Avenue station (Station 1) is limited for communication functions. When a new station is built the space allocation for communications should be increased.

16. Add Three Full-Time Crews (Section 2.4.3.7)

In order to staff the four urban stations with full-time staff on a 24 hour, seven day a week basis, three full-time crews need to be added over the course the plan. This requires hiring 20 firefighters per crew to regularly staff each station with four firefighters. The total requirement would be 60 firefighters over the course of implementing the plan.

The Insurance Advisory Organization who administers the Fire Underwriters Survey recommends one Full-time Firefighter for every 1,000 per capita population.

17. Platoon Chief Position (Section 2.4.3.7)

The addition of 60 full-time firefighters within the next 7 years will present the need for additional on-shift management support. It is recommended that the position of platoon chief be created to assist with day to day management of firefighting staff within all four urban stations. One Platoon Chief for each platoon will be required for a total of four. One of the new stations should provide accommodation for the platoon chiefs.

18. Interim Operating Model (Section 2.4.3.7)

A number of technician positions must be filled to provide the Town of Milton with the staff resources to deliver an appropriate level of fire protection services. The fire department currently relies on part-time firefighter response for initial response purposes in some areas and to provide adequate strength in numbers. Daytime hours are the most difficult to cover since part-time firefighters often have primary employment demands. An interim operating model for fire suppression would see fire department technicians fulfilling a “dual role” as daytime operations staff.

3.0 STRATEGIC PLAN GOALS AND OBJECTIVES

3.1 DESTINY MILTON 2

The Town of Milton's strategic plan (Destiny Milton 2) was reviewed. Listed below are the goals, supporting directions and key initiatives that are relevant to the Milton Fire Department.

➤ ***GOAL 1 - A Responsible, cost-effective and accountable local government***

Direction 1: Establish priorities that support the municipal service requirements of the majority of local residents.

- Ensure that the service plans are reviewed annually and reported to Town Council
 - Review Fire Master Plan to ensure that inspection targets are met, staffing priorities are followed and station location plans are implemented;
- Ensure that the cost effectiveness of service delivery is a priority
 - Monitor growth and adjust implementation plan to suit;
 - Explore interim options to deliver service (e.g. "dual duty" daytime staffing);
- Ensure that the concept of 'service excellence' serves as the basis for service delivery
 - Continue delivering public education programs (e.g. Smoke Alarm Awareness Program) to residents through front line staff and part-times and target the senior population with more focused programs;
 - Continue excellent initiatives on the Information Technology front;
- Ensure the effective and regular communication of municipal objectives to staff for implementation
 - Regular communication of corporate strategic direction and how what they are implementing ties to those objectives;
- Ensure that municipal staff are able to effectively and efficiently deliver required municipal services
 - Staffing priorities must be addressed in order to deliver adequate fire protection services;
- Ensure that municipal human resource needs are factored into decisions on what services are to be provided and how
 - Staffing priorities have been identified and will continue to factor into decisions related to service provision.

Direction 2: Engage in transparent and accountable decision-making processes.

- Use technology to expand/enhance the delivery of on-line services
 - Offer burn permits online (has been initiated) in addition to in person, which may reduce the workload for administrative staff when renewals are due;
- Enhance communication between the government and its citizens
 - Continue to use local newspapers and Town website as sources for disseminating information about fire prevention and education;
- Educate the public about what is within and outside of the Town's direct control/sphere of influence
 - Use local newspapers and Town website to publish information describing fire department services over which Town has control (e.g. fire suppression level of service, fire code inspection targets, public education programs delivered);
- Increase the use of electronic communication to ensure that residents and business owners are aware of municipal opportunities and initiatives
 - Promote the use of the Town website for Fire Department information so that residents know to

refer to it.

Direction 3: Properly fund municipal services and community infrastructure through a combination of fiscally responsible operating budgets, capital budgets, effective reserves and reserve fund management.

- Ensure the efficient management of capital assets and municipal services to meet existing and future demands
 - Monitor growth and adjust implementation plan to suit;
 - Continue to update fleet replacement plan;
- Enhance communication and coordination with the Region and other levels of government in the provision of services
 - Aid agreements with other municipalities are in place for fire protection but must be reviewed periodically;
 - Continue to explore opportunities to “share” expertise and/or specialized equipment between other fire departments (e.g. Hazmat, trench rescue);
 - Emergency Medical Services are provided by the Region of Halton which avoids unnecessarily taxing the Fire Department with medical emergencies, allowing them to focus on their strengths (fires, motor vehicle accidents, etc.);
- Require that an annual report be prepared to provide an overview on how the municipality’s objectives have been met and how funds were budgeted, allocated and spent
 - Report annually on successes with inspection targets, staffing priorities and station location plans.

Direction 4: Demonstrate leadership on matters that affect Milton.

- Participate fully in Region-led exercises that are intended to maintain and enhance quality of life
 - Continue to train for and obtain accreditation for Superior Tanker Shuttle operations;
 - Engage other levels of government to ensure that the interests of Milton residents and business owners are known
 - Ensure that Federal and Provincial programs that may benefit Milton are considered whenever possible
 - Explore options through the Town’s Emergency Management Coordinator for Federal funding through the Joint Emergency Preparedness Program (JEPP);
 - Ensure that Milton’s interests and needs are known at the Regional level
 - Communicate Milton plans through local councillors and to the Regional coordinating group. Search for opportunities to share resources;
 - Continue local political and staff participation on Boards and Committees both within and outside the Milton community:
 - Community Services Advisory Committee (a committee of Council);
 - Regional Chiefs Committee;
 - Joint Emergency Service Operations Advisory Group (JESOAG);
 - Regional Emergency Planning Advisory Committee (REPAC);
 - Local Emergency Planning Committee.
- ***GOAL 2 - Well managed growth, well planned spaces***

Direction 2: Facilitate the safe movement of people and goods, and enhanced travel to, from and within the community.

- Encourage effective traffic management and the streamlined movement of traffic
 - Continue to provide traffic signal pre-emption for emergency vehicles (e.g. Opticom).

Direction 3: Encourage and influence cost effective and timely municipal/community infrastructure development.

- Encourage the efficient use of land to make the best use of infrastructure and services
 - Consider alternative fire station configurations that may include co-location with other Town departments or commercial developments;
- Ensure that appropriate financial plans and infrastructure strategies are in place before development occurs
 - Consider impacts of roadway network choices for new and existing developments on fire department access.

Direction 4: Encourage well timed service delivery.

- Ensure that hard and soft service needs are identified up front and then appropriately prioritized and delivered either before or at the same time as new development
 - Incrementally add fire suppression staff in order to have sufficient resources when new fire stations are opened;
- Encourage the development of public facilities in appropriate locations at the right time to meet the needs of present and future residents
 - Monitor growth and revise the station location implementation plan as needed;
- Ensure that appropriate capital works forecasting/planning is done before the works are required
 - Station location implementation plan addresses capital and human resource needs.

➤ ***GOAL 3 - A safe, liveable and healthy community***

Direction 2: Maximize community safety and security.

- Encourage the development of fire service facilities at the right time in locations that provide the maximum benefit to all residents/businesses
 - Addressed in the station location implementation plan;
- Enhance relationships with regional emergency service providers in adjoining jurisdictions so that cost effective and timely emergency response and support functions are maintained
 - Continue to work with the Region's Emergency Medical Services;
- Encourage the establishment and maintenance of a road network that facilitates the movement of emergency service and all other vehicles
 - Consider impacts of roadway network choices for new and existing developments on fire department access;
 - Continue to provide traffic signal pre-emption for emergency vehicles (e.g. Opticom).

➤ ***GOAL 5 - A thriving natural environment that is a Valued Community Asset to be Protected, Maintained and Enjoyed***

Direction 1: Protect and enhance natural features and their associated ecological and hydrological functions.

- Require that the land use planning process within our jurisdiction contributes to the protection, maintenance and enhancement of water and related resources and aquatic ecosystems on an

integrated watershed basis

- Identification and mapping of water sources in rural areas for fire suppression purposes should be promoted.

The long list of initiatives identified above cannot all be addressed by Town at the same time. Many initiatives are interrelated and can be combined. Some can be targeted immediately and others must wait.

4.0 TRANSLATING GOALS AND OBJECTIVES INTO STRATEGIES

The workload of all divisions of the Fire Department will increase as the population increases putting challenges on the existing administrative, training, fire prevention, and public education staff. However, the biggest challenge that the Milton Fire Department will face in light of anticipated growth is the transition from predominantly part-time staffing to predominantly full-time staffing complimented by part-time staffing.

The main strategies resulting from the assessment of Town goals and objectives are:

- Review Fire Master Plan annually:
 - ensure that inspection targets are met, staffing priorities are followed and station location plans are implemented; and
 - Monitor growth and adjust implementation plan and/or staffing priorities to suit.
- Three year priorities include:
 - Advance with key fire department hires;
 - Renovate Station 1,
 - Investigate build opportunities of a Training Facility on suitable town owned lands;
 - Build, staff and equip Station 4 in the vicinity of James Snow Parkway and Waldie Avenue
 - Secure lands for a Station 3 relocation
 - Secure lands for a future Station 5 build
 - Explore interim options to deliver service (e.g. “dual duty” daytime staffing);
 - Continue delivering public education programs (e.g. Smoke Alarm Awareness Program) to residents through front line staff and part-time and target the senior population with more focused programs;
 - Continue excellent initiatives on the Information Technology front; and

5.0 IMPLEMENTATION AND PHASING

In order to meet the demands of growth identified within the Official Plan, the Milton Fire Department will have to follow an implementation plan that is linked to the pace of development. No significant staffing changes have occurred within the department prior to 2008. As such, the initial years of the plan set a steep pace to achieve acceptable service levels by the time full development occurs.

Table 7 details the implementation schedule of each of the elements of the plan, segregated by year of implementation. Timing of station locations should follow the rate of development and priorities can be shifted if needed.

The fire department will require significant internal resources for the planning, design and construction phases of station construction and/or relocations. The additional support of the approved second Deputy Fire Chief and more support for existing staff will greatly assist in the management of these large projects.

5.1 FINANCIAL IMPLICATIONS

The renovation of Stations 1, relocation of Station 3 and the construction of new Stations 4 and 5 are part of the implementation plan. An estimated total of \$10 million was identified within the 10 year implementation plan to cover these initiatives. A portion of these costs is DC eligible.

The implementation plan identifies a need for three new pumper vehicles and associated equipment at an estimated cost of approximately \$2.5 million. Other ancillary vehicles and equipment (e.g. tools, and small machinery) may be needed that have not been considered within this plan. Part of these costs would be DC eligible.

Equipment for firefighters (e.g. bunker gear, breathing apparatus) should be considered in at a cost of \$5,000 per firefighter. With the addition of 60 firefighters this amounts to \$300,000 worth of firefighter equipment.

The final year of the plan would see operating costs increase by \$5.2 million over existing costs. Capital cost allowances for stations and apparatus amount to \$12.1 million of which the majority would be considered DC eligible.

Table 7 – Implementation Schedule*

Plan Year	Station Relocation/Renovation/Construction	Staff Hiring
2008*	<ul style="list-style-type: none"> • Build Station 4 Land – Purchase • Build Station 4 – Site Design Work • Build Station 4 – Construction (Phase 1) • Secure Training Facility – Lands* • Central Station Renovation Design • Purchase Land – Station 3 Relocation Site 	<ul style="list-style-type: none"> • Hire Additional Deputy Chief (Approved 2008 Budget) • Hire 5 Full-time Technicians (Approved 2008 Budget)
2009*	<ul style="list-style-type: none"> • Build Station 4 – Construction (Phase 2) • Central Renovation – Construction (Phase 1) • Build Station 5 Land – Purchase 	<ul style="list-style-type: none"> • Hire Full Time Administrative Assistant • Hire (5) Full-time Firefighters – Day Shift Station 4 • Training Technician • Fire Prevention Inspector
2010*	<ul style="list-style-type: none"> • Central Renovation – Construction (Phase 2) 	<ul style="list-style-type: none"> • Hire (15) Full-time Firefighters – 7/24 hour staffing Station 4
2011	<ul style="list-style-type: none"> • Relocate Station 3 – Site Design Work • Build Station 3 Construction (Phase 1) • Build Station 5 Land – Site Design Work • Build Station 5 Construction (Phase 1) 	<ul style="list-style-type: none"> • Hire (20) Full-time Firefighters – 7/24 hour staffing Station 1 • Hire (1) Fire Prevention Inspector • Hire (1) Public Education Technician • Hire FDM/CAD Analyst
2012	<ul style="list-style-type: none"> • Build Station 3 Construction (Phase 2) • Build Station 5 Construction (Phase 2) 	<ul style="list-style-type: none"> • Hire (5) Full-time Firefighters – Day Shift Station 5 • Hire (2) Fire Prevention Inspectors
2013		<ul style="list-style-type: none"> • Hire (15) Full-time Firefighters – 7/24 hour staffing Station 5 • Hire (1) Fire Prevention Inspector
2014		<ul style="list-style-type: none"> • Hire (4) Platoon Chiefs (Chief Officers) • Hire (2) Fire Prevention Inspectors

*2008/2009/2010 hiring mirrors existing Human Resources Staffing Plan

*Training Facility is a joint partnership with the Public Works/Operations Centre.

*All implementation subject to Operating and Capital Budgets approvals

APPENDIX A
FLEET REPLACEMENT PLAN

Appendix A - Apparatus Replacement Schedule																												
Apparatus		Description	Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Station 01 - 405 Steeles Avenue																												
Pumper	11	FL80 Freightliner	2000			\$50,000					\$500,000																	
Pumper	21	FL80 Freightliner	1995				\$500,000																					
Tanker	25	FL80 Freightliner	2004										\$40,000						\$320,000									
Aerial	36	E-ONE	1997				\$65,000							\$680,000									\$1,200,000					
Air Support Vehicle	5	Dodge Sprinter	2005														\$125,000											
Support Van	163	Ford Cube Van	1990									\$125,000														\$125,000		
Pick-Up	20	Ford 350	2000				\$68,000								\$68,000													
Pick-Up	30	Dodge 250	2006								\$68,000								\$68,000									
Water Supply	10	Ford 550	2000				\$160,000										\$160,000			\$68,000								
Hazmat Trailer	102	Pacer Trailer	2004										\$6,000						\$17,000									
Station 02 - 2665 Reid Side Road																												
Pumper	22	International	1997	\$50,000					\$500,000																			
Tanker	15	FL80 Freightliner	2002								\$40,000						\$320,000											
Pumper Rescue	14	ALF/Metropolitan	2004										\$40,000						\$400,000									
Pumper Rescue	24	M2 Freightliner	2005											\$35,000						\$370,000								
Aerial (50')	16	ALF/EAGLE	2006													\$70,000							\$1,200,000					
Station 03 - 2800 Derry Road																												
Pumper	31	ALF/Metropolitan	2002						\$50,000					\$500,000														
Tanker	35	FL80 Freightliner	2002								\$40,000						\$320,000											
Rescue Van	34	GMC Cube Van	1988												\$20,000						\$200,000							
Other Vehicles																												
Car-Fire Chief	1	Ford Police Int.	2000		\$52,000								\$52,000															
Car-Deputy Chief	2	Ford Police Int.	2001			\$52,000								\$52,000														
Support Vehicle	7	Ford 250	1999	\$55,000								\$55,000																
Truck	161	Ford Freestar	2006								\$45,000								\$45,000									
Car-Fire Prevention	181	Ford Police Int.	2005							\$52,000								\$52,000										
Van-Fire Prevention	182	Ford Van	2002				\$55,000								\$55,000													
Trailer	101	Trailer	1990					\$15,000												\$6,000								
Utility Vehicle	33	Polaris Ranger	2006										\$45,000										\$45,000					
Total Required Capital					\$105,000	\$52,000	\$102,000	\$848,000	\$15,000	\$550,000	\$52,000	\$693,000	\$180,000	\$183,000	\$1,267,000	\$143,000	\$70,000	\$925,000	\$52,000	\$850,000	\$376,000	\$200,000	\$0	\$2,445,000	\$0	\$0	\$0	\$125,000



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Appendix B to Staff Report FIRE-003-08 FIRE DEPARTMENT - IMPLEMENTATION PLAN

PRIORITY LEVELS - Level 1 (Short Term 1 - 3 years); Level 2 (Medium Term 3-5 years); Level 3 (Long Term 5-10 years) 1/2/3/ Continual Long Term					
Goals from DM2	Directions from DM2	Goal(s) identified in DM2 affecting the Department	Function within the Department Service Plan	Action(s), Budget, Service Level, Year	Dept. Level Ranking 1, 2 or 3
GOAL #1 A responsible, cost-effective and accountable local government.	DIRECTION #1 Establish priorities that support the municipal service requirements of the majority of local residents.	<ol style="list-style-type: none"> 1. Ensure that the service plans are reviewed annually and reported to Town Council 2. Ensure that the cost effectiveness of service delivery is a priority 3. Ensure that the concept of 'service excellence' serves as the basis for service delivery 4. Ensure the effective and regular communication of municipal objectives to staff for implementation 5. Ensure that municipal staff are able to effectively and efficiently deliver required municipal services 6. Ensure that municipal human resource needs are factored into decisions on what services are to be provided and how 	Fire Chief " " Dep. Chief(s) CFPO Dep. Chief(s) SServ. Coord. Fire Chief	1(a) Review Fire Master Plan to ensure that inspection targets are met, staffing priorities are followed and station location plans are implemented; Initial report presented Mar 2008. 2(a) Monitor growth and adjust implementation plan to suit. 2(b) Explore interim options to deliver service (e.g. "dual duty" daytime staffing); Hire FF Technicians 2008. 3(a) Continue delivering public education programs (e.g. Smoke Alarm Awareness Program) to residents through front line staff and part-timers and target the senior population with more focused programs; assigned FP staff 2008. 3(b) Continue excellent initiatives on the Information Technology front; fully implement CAD/FDM 2008. 4(a) Regular communication of corporate strategic direction and how/what they are implementing ties to those objectives; Quarterly reports.	2 2 1 1 1 1



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			Fire Chief	5(a) Staffing priorities must be addressed in order to deliver adequate fire protection services; Per HR Report CS-078-07 for years 2008-2010.	1
			"	6(a) Staffing priorities have been identified and will continue to factor into decisions related to service provision. Departmental re-alignment provided in Feb 2008.	1
	DIRECTION #2 Engage in transparent and accountable decision-making processes and actions.	<ol style="list-style-type: none"> 1. Use technology to expand/enhance the delivery of on-line services 2. Enhance communication between the government and its citizens 3. Educate the public about what is within and outside of the Town's direct control/sphere of influence 4. Increase the use of electronic communication to ensure that residents and business owners are aware of municipal opportunities and initiatives 	Supervisor – Admin Fire Chief Dep. Chief(s) CFPO " "	1(a) Offer burn permits online in addition to in person, which may reduce the workload for administrative staff when renewals are due; initiated 2008. 2(a) Continue to use local newspapers and Town website as sources for disseminating information about fire prevention and education; establish partnerships. 3(a) Use local newspapers and Town website to publish information describing fire department services over which Town has control (e.g. fire suppression level of service, fire code inspection targets, public education programs delivered); Operational FP budget. 4(a) Promote the use of the Town website for Fire Department information so that residents know to refer to it. 2008 Website update.	1 1 1 1



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	DIRECTION #3 Properly fund municipal services and community infrastructure through a combination of fiscally responsible operating budgets, capital budgets, effective reserves and reserve fund management.	1. Ensure the efficient management of capital assets and municipal services to meet existing and future demands 2. Enhance communication and coordination with the Region and other levels of government in the provision of services 3. Require that an annual report be prepared to provide an overview on how the municipality's objectives have been met and how funds were budgeted, allocated and spent	Fire Chief	1(a) Monitor growth and adjust implementation plan to suit;	1
			Dep. Chief(s)	1(b) Continue to update fleet replacement plan; continual 10 year outlook.	1
			Fire Chief	2(a) Aid agreements with other municipalities are in place for fire protection but must be reviewed periodically;	1
			"	2(b) Continue to explore opportunities to "share" expertise and/or specialized equipment between other fire departments (e.g. Hazmat, trench rescue);	2
			"	2(c) Emergency Medical Services are provided by the Region of Halton which avoids unnecessarily taxing the Fire Department with medical emergencies, allowing focus on strengths (fires, motor vehicle accidents, etc.); consider modified tiered response.	2
			"	3(a) Report annually on successes with inspection targets, staffing priorities and station location plans. Quarterly reports.	1
	DIRECTION #4 Demonstrate leadership on matters that affect Milton.	1. Participate fully in Region-led exercises that are intended to maintain and enhance quality of life 2. Engage other levels of government to ensure that the interests of Milton residents and business owners are known. 3. Ensure that Federal and Provincial programs that may benefit Milton are considered whenever possible	Dep. Chief(s)	1(a) Continue to train for and maintain accreditation for Superior Tanker Shuttle operations;	1
			Train. Coord.		
			Fire Chief	2(a) Participate in regional, provincial, national and international Fire Chief's Associations – maintain awareness of issues.	1
			"	3(a) Explore options through the Town's Emergency Management Coordinator for Federal funding through	2



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		4. Ensure that Milton's interests and needs are known at the Regional level 5. Continue local political and staff participation on Boards and Committees both within and outside the Milton community:	“ “ “ Fire Chief/Deputy Chief(s)	the Joint Emergency Preparedness Program (JEPP); 4(a) Communicate Milton plans through local councillors and to the Regional coordinating group. Search for opportunities to share resources; 5(a) Community Services Advisory Committee (a committee of Council); 5(b) Regional Chiefs Committee; 5(c) Joint Emergency Service Operations Advisory Group 5(d) Regional Emergency Planning Advisory Committee (REPAC); 5(e) Local Emergency Planning Committee.	1 1 1 1 1
GOAL #2 Well Managed growth, Well planned spaces.	DIRECTION #1 Encourage provision and maintenance of an approximate mix of residential, commercial, industrial and institutional uses.	1. Participate in municipally led exercises that are designed to explore and investigate the interests of Milton residents and business owners with respect to land use planning.	Fire Chief Dep. Chief(s)	1(a) Participate in the Derry Green BP 2 development process providing input/feedback. 1(b) Participate in municipal discussions and committee meetings regarding applications of sub-division development, site design, roadworks, etc.	1/2/3 1/2/3



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	<p>DIRECTION #2</p> <p>Facilitate the safe movement of people and goods, and enhanced travel to, from and within the community.</p>	<p>1. Encourage effective traffic management and the streamlined movement of traffic</p>	<p>Dep. Chief(s)</p>	<p>1(a) Continue to provide traffic signal pre-emption for emergency vehicles (e.g. Opticom). 1(b) Work with corporate staff regarding design and use of transportation corridors.</p>	<p>1/2/3 1/2/3</p>
	<p>DIRECTION #3</p> <p>Encourage cost effective and timely municipal/community infrastructure development.</p>	<p>1. Encourage the efficient use of land to make the best use of infrastructure and services 2. Ensure that appropriate financial plans and infrastructure strategies are in place before development occurs</p>	<p>Fire Chief Dep. Chief(s)</p>	<p>1(a) Consider alternative fire station configurations that may include co-location with other Town departments or commercial developments; Relocation recommendations provided March 2008. 2(a) Consider impacts of roadway network choices for new and existing developments on fire department access.</p>	<p>1 1/2/3</p>
	<p>DIRECTION # 4</p> <p>Encourage well timed service delivery.</p>	<p>1. Ensure that hard and soft service needs are identified up front and then appropriately prioritized and delivered either before or at the same time as new development 2. Encourage the development of public facilities in appropriate locations at the right time to meet the needs of present and future residents 3. Ensure that appropriate capital works forecasting/planning is done before the works are required.</p>	<p>Fire Chief</p>	<p>1(a) Incrementally add fire suppression staff in order to have sufficient resources when new fire stations are opened; Re: HR plan CS-078-07 2(a) Monitor growth and revise the station location implementation plan as needed; 3(a) Station location implementation in master service plan addresses capital and human resource needs.</p>	<p>1 2 1</p>



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GOAL #	DIRECTION #				
GOAL #3 A safe, liveable and healthy community.	DIRECTION #1 Promote and facilitate active and healthy lifestyles and life long learning.	1. Encourage the development of new partnerships and maintain existing partnerships and strategic alliances to encourage community ownership and responsibility.	All Staff	1. Participate in community functions strengthening pride and ownership of a fun, safe, active lifestyle (i.e. Relay for Life, Risk Watch safety programs, safe communities, Community Open Houses, Public Relations, Community events, etc.)	1/2/3
	DIRECTION #2 Maximize community safety and security.	1. Encourage the development of fire service facilities at the right time in locations that provide the maximum benefit to all residents/businesses 2. Enhance relationships with regional emergency service providers in adjoining jurisdictions so that cost effective and timely emergency response and support functions are maintained 3. Encourage the establishment and maintenance of a road network that facilitates the movement of emergency service and all other vehicles	Fire Chief “ Dep. Chief(s) “	1(a) Addressed in the station location implementation plan; 2(a) Continue to work with the Region's Emergency Medical Services; 3(a) Consider impacts of roadway network choices for new and existing developments on fire department access; 3(b) Continue to provide traffic signal pre-emption for emergency vehicles (e.g. Opticom).	2 2 1/2/3 1/2/3



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Appendix B to Staff Report FIRE-003-08 FIRE DEPARTMENT - IMPLEMENTATION PLAN

	<p>DIRECTION #3</p> <p>Protect and enhance our heritage, identity and character.</p>	<ol style="list-style-type: none"> 1. Respect and honour the Town's rich history 2. Establish and maintain a community identity that sets Milton apart from others through the holding of community events, promotion and branding. 	<p>Fire Chief All Staff</p>	<p>1(a) Integrate history and maintain/protect artefacts into the design of existing and future fire stations (i.e. fire museum). Station 4 build/design 2008/2009. Currently exists in Station 1.</p> <p>2(a) Maintain community pride and ownership of a caring, involved fire service in the municipality (i.e. customer service, continual marketing, etc.)</p>	<p>1</p> <p>1/2/3</p>
<p>GOAL # 4</p> <p>A diverse and sustainable economy.</p>	<p>DIRECTION #1</p> <p>Make the Central Business District the main focal point of the community.</p>	<ol style="list-style-type: none"> 1. Reinforce and encourage the function of the Central Business District as the administrative, cultural, entertainment, commercial, social and historic focal point of the community. 	<p>Fire Chief</p> <p>Dep. Chief(s) CFPO</p>	<p>1(a) Ensure response time and depth of response coverage is conducive to ensuring limited fire loss and continued business continuity as practically as possible.</p> <p>1(b) Provide requested and other fire inspection services to ensure continued compliance with fire and life safety codes.</p>	<p>1/2/3</p> <p>1/2/3</p>
	<p>DIRECTION #2</p> <p>Attract and retain employers that provide a range of employment opportunities and assessment growth.</p>	<ol style="list-style-type: none"> 1. Encourage the development of the business infrastructure required to attract uses that will contribute to the quality of life in the Town. 	<p>Fire Chief</p> <p>Dep. Chief(s) CFPO</p>	<p>1(a) Participate in the development and consultation processes (i.e. Derry Green) and ensure response time and depth of response coverage is conducive to ensuring limited fire loss and continued business continuity as practically as possible.</p> <p>1(b) Provide requested and other fire inspection services to ensure continued compliance with fire and life safety codes.</p>	<p>1/2/3</p> <p>1/2/3</p>



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	DIRECTION #3 Encourage the private sector to meet the retail needs of growing population in a reasonably timely manner.	1. Provide opportunities to integrate retail uses with residential uses on major roads.	Fire Chief	1(a) Participate in the development and consultation processes and ensure response time and depth of response coverage is conducive to ensuring limited fire loss and continued business continuity as practically as possible. 1(b) Be a constant ambassador for the Town encouraging a balance of development and community safety.	1/2/3 1/2/3
GOAL #5 A valued natural environment to be protected maintained and enjoyed.	DIRECTION #1 Protect and enhance natural features.	1. Require that the land use planning process within our jurisdiction contributes to the protection, maintenance and enhancement of water and related resources and aquatic ecosystems on an integrated watershed basis.	Dep. Chief(s) S. Serv. Coordinator.	1(a) Identification and mapping of water sources in rural areas for fire suppression purposes to be charted with implementation of GIS/CAD system interface in 2008.	1



The Corporation of the TOWN OF MILTON

Appendix C – Fire Department Station Relocation Recommendation

Re: RECOMMENDATION (FIRE -003-08):

“That Council authorizes staff to institute the necessitated actions for the sale and purchase of lands necessary to invoke the station location recommendations outlined in “Appendix C” of this report.”

BACKGROUND:

Milton Council previously considered fire station location recommendations as highlighted in Report FIRE-02-04. The recommendations made in that report were made subsequent to a document prepared by Walter Fredy Partnerships and was a follow up to the Master Fire Plan prepared in 1998.

The “Fredy” report utilized the “Fire Opt” station location software and also was influenced by the land availability of the day as well as the corporate priorities and financial abilities (i.e. growth) of the municipality at the time.

Presently before Milton Council is a current Fire Department Master Service Plan as prepared by Dillon Consulting. This report also utilizes the Fire Opt station location software and also takes into account the land availability of today as well as the current corporate priorities and financial abilities (i.e. projected growth and current development) of the municipality.

DISCUSSION:

The recommended deviation from the FIRE-02-04 report includes implementing the following station location changes:

- Central Fire Station #1 (maintain status quo location and renovate),
- Campbellville Station #2 (maintain status quo),
- Derry Road Station #3 (relocate to Derry Road near Tremaine Road),
- New Station #4 (to be located on lands adjacent to James Snow Parkway and Waldie Avenue),
- New Station #5 (to be located near Hwy. 25 and future Louis St. Laurant).

The advantage(s) of this recommendation include:

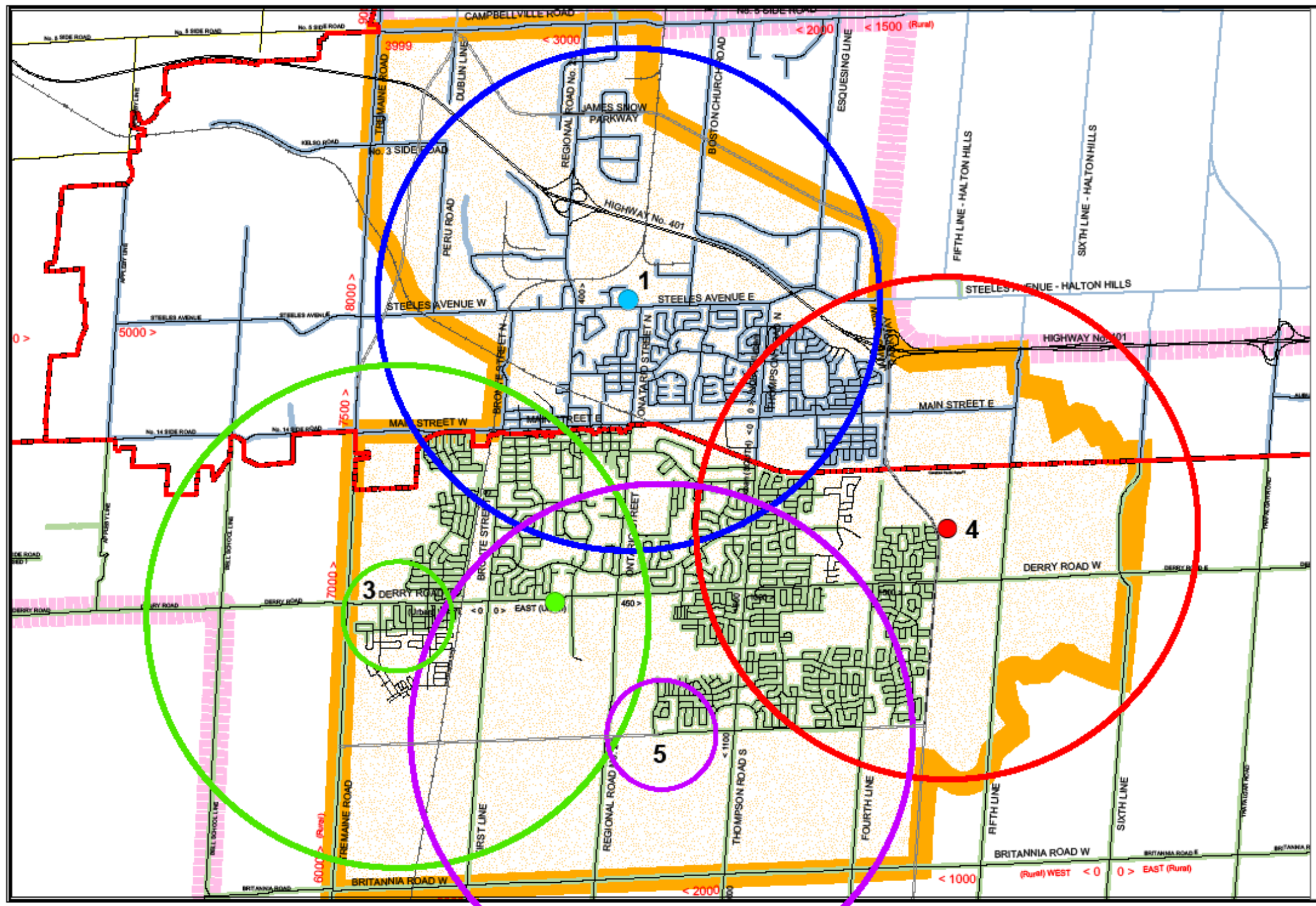
- a) keeping the existing Central Fire Station #1 location (renovations versus station replacement),
- b) providing balanced residential and proposed business park land (Derry Green - BP 2) response coverage via the Station Four site,
- c) equalizing urban fire station resources that propose to provide adequate response coverage while taking into account geographical and transportation corridor obstacles (i.e. train routes, access to major highways, support to rural areas, etc.) as well as projected growth.

Attached is an illustration of the proposed station locations as per the recommendations of the 2008 Fire Department Master Service Plan.

Respectfully submitted,

Brian Ellsworth,
Fire Chief.

Attachment: Proposed Fire Station Locations, March 2008.



MILTON FIRE DEPARTMENT **FIRE STATION LOCATIONS - PROPOSED MARCH 2008**
Geographical Information **EXTENDED URBAN AREA**

Support Services (36000) H:\GIS Mapping\Fire-Communications\Station Locations - Urban Revised: March 9 - 2008