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Municipality of Meaford



Master Fire Plan



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Executive Summary

The Municipality of Meaford has developed this Master Fire Plan to provide strategic direction and guidance for the continued evolution of the Fire Services throughout the next decade.

To ensure that they are meeting the needs of the community and its staff, the Municipality recognizes that it is necessary to update and maintain a Master Fire Plan ("Master Plan") for the purpose of providing high-quality fire services to the residents of the Municipality and its visitors. A Master Plan allows for prudent operating and capital budget forecasting, and to assist neighbouring municipalities through the provision of Mutual Aid, Automatic Aid, and Fire Service Agreements.

In January 2018 the Office of the Fire Marshal and Emergency Management (OFMEM) conducted a review of the Fire Protection Services in the Municipality of Meaford and stated:

This review has determined that the Municipality of Meaford is not meeting the expectations of the OFMEM. It is the opinion of the OFMEM that the following components are either not in place or require improvement in order for the municipality to demonstrate that it is meeting its legislated responsibilities under Sub-clause 2.(1)(a) of the FPPA:

- The processes for the distribution of public safety education materials should be improved, and*
- A formal program addressing the topic of inspections based on complaint or request should be implemented to provide a consistent approach for timely management, and proper documentation.*

The review also indicated that the municipality is not fully compliant with some of the legislated requirements in the FPPA and the Fire Code O. Reg. 213/07.

In addition to addressing the concerns of the OFMEM report, this Master Fire Plan for the Municipality of Meaford has reviewed and identified current and anticipated community fire risks and needs over the next ten years.

This review has examined and researched various aspects including Fire Department operations, planning, fire prevention, training and education, communications, apparatus and equipment, maintenance, human resources, station suitability (accommodations) and locations, and budgets. A more in-depth review was conducted of the Meaford and District Fire Department (MDFD), being directly operated by the Municipality. As the Inter-Township Fire Department (ITFD) is a contracted fire service for approximately 50% of the geographical area of the Municipality, and a 25% ownership by the Municipality of Meaford, we conducted a high-level review of those issues directly impacting operations within the Municipality.

Based on the information received during our meetings and a review of supplied documentation and reference to industry standards and best practices, a total of 47 recommendations have been made for consideration to assist the Municipality in guiding their fire service into the future. With two fire services covering the Municipality, some of the recommendations apply only to the MDFD or ITFD, while other recommendations may apply to both. Several of the recommendations are designed to give the Municipality better insight into the services being provided across the community and to ensure reporting mechanisms are the same for both fire services.

For ease of reference, the recommendations in the Executive Summary have been grouped by general topic area (but with their original recommendation number based on the order found in the document). The general topic areas for the recommendations in the Executive Summary are:

- Administration
- Health & Safety
- Operations
- Western Station
- Dispatch
- Fire Prevention
- Training
- Vehicles
- ITFD (these recommendations apply specifically to the ITFD and/or the relationship between the MDFD and ITFD)

Both this MFP and the previous MFP completed in 2011 by another professional consulting firm make strong recommendations for a second fire station in the western side of the Municipality.

It should be noted that there are numerous recommendations showing that they should be addressed in the short term. While the fire department has made significant strides in the past couple of years, there is still a lot of work to be completed. This is reflected both in the body of this report as well as the report completed by the Office of the Fire Marshal and Emergency Management (OFMEM) in 2018.

There are a number of recommendations that are operational that can be dealt with internally by the fire departments (MDFD and ITFD), while others will require council review and decisions.

Administration

In the past few years, the MDFD had its staffing reduced from a full-time Fire Chief, full-time Deputy Chief, and full-time Administrative Assistant to a full-time Fire Chief, contracted part-time Fire Prevention Officer (while under contract has worked full-time hours for the last portion of 2018), and an Administrative Assistant at 3.5 hours per week. Considering the

recommendations contained within this report and the accompanying workload, the report contains recommendations to increase the MDFD staffing including a full-time Fire Prevention Officer and Administrative Assistant to 15-21 hours per week.

Standard Operating Guidelines provide direction to firefighters and officers on a wide range of areas including health and safety, fireground operations, training, fire prevention, administration, promotional processes, etc., and therefore should be reviewed and updated regularly (within three years). Many of the ITFD SOGs are more than 10 years old, and both fire departments need to look at the comprehensiveness of their SOGs.

Fire Prevention

One of the major challenges facing the Municipality and much of the focus of the OFMEM report, is the disjointed and incomplete Fire Prevention Program across the Municipality. The Fire Prevention Program includes fire prevention education, inspections, and enforcement, and must be consistently applied across the Municipality regardless of which fire department is providing service.

Hiring a full-time Fire Prevention Officer to be responsible for the entire Municipality will be highly effective in addressing the concerns identified within this report as well as the OFMEM report.

Other Fire Prevention recommendations include: updating the Simplified Risk Assessment; ensuring proper training for Fire Inspectors; using the Integrated Risk Management tool; training fire department officers (e.g. lieutenants, captains) in Fire Prevention and Education; utilizing the record management system to document fire prevention activities; encouraging residential fire sprinklers; and enhancing the media/social media presence of the fire department.

Further, new provincial regulations require that each municipality conduct a Community Risk Assessment, which is a labour-intensive process building on the Simplified Risk Assessment (which is incomplete across the Municipality) and the Integrated Risk Management tool (which has not been utilized yet). Updating the SRA, starting the IRM, and then conducting the CRA will be a multi-year project for the Fire Prevention Officer.

Health & Safety

Firefighting is inherently dangerous with firefighters facing serious and even fatal injuries and illnesses (including cancers). These risks are posed in response, on the emergency scene, and post emergency (dealing with contaminated gear). An inadequate focus on health and safety at both fire departments places the Municipality at significant liability. The report contains a number of health and safety recommendations including ensuring effective and knowledgeable health and safety committees, ensuring firefighters are fully aware of their health and safety

rights and responsibilities, effective SOGs including referencing Section 21 (health & safety) guidelines, eliminating responses to emergency scenes in personal vehicles, and reducing potential toxic fumes in the fire station.

Operations

There are a number of operational recommendations to improve firefighting and rescue capabilities across the Municipality including: realigning response boundaries to have the closest fire station respond; establishing a fire protection agreement with Chatsworth for the southwest portion of the Municipality where they are closer than ITFD; undertaking a Water Tanker Shuttle Accreditation process; and investigating the placement of cisterns and dry hydrants in the rural communities to provide emergency water sources.

Response time and fire station coverage is discussed extensively in the report with a recommendation that a fire station be established in the western portion of the Municipality, improving response coverage for residents in the area. While there would be initial capital and start-up costs, the annual operational costs would be less than half of the current contribution to ITFD.

Dispatch

There are recommendations relative to the current dispatch protocols (closest station, dual station response), and confirming that the dispatch agreement ensures the dispatch centre and their training program are meeting the applicable standards.

Training

Firefighters must be highly trained and prepared to respond to a wide variety of emergencies including structural fires, hazardous materials, motor vehicle collisions, medical emergencies, rescues, and other emergencies. Therefore, a comprehensive training program is required to keep the firefighters safe and to give them the knowledge and skills to carry out their functions. Areas of recommendations include: appointing Platoon Training Instructors to help plan, organize, deliver, and document the training program; utilizing Job Performance Requirements as the basis of the training program; creating training SOGs; ensuring promotions are consistent with National Fire Protection Association standards; and ensuring there is proper documentation of the training in a records management system.

Vehicles

Aerial trucks are a valuable tool for a wide range of firefighting and rescue operations. The current aerial truck has exceeded the end of its recommended life span and therefore we are recommending its replacement. While there are other options discussed such as fire service agreements with neighbouring communities, they would all have extended response times and

no guarantee of availability when requested.

Light vehicles (e.g. pickup trucks, SUVs) typically have a 7-year life span in an emergency response function but can have extended use in a non-emergency role. Therefore, we have recommended that the Chief's vehicle be replaced and that the current vehicle be utilized for the Fire Prevention Officer.

A serious risk at emergency calls, specifically those calls along highways and major roadways, are vehicles running into first responders and their vehicles. To help address this risk, Ontario has introduced the use of blue lights along with red lights for emergency vehicles to increase visibility thereby increasing safety during response and at scenes. It has been recommended that funds be allocated to ensuring all apparatus have chevrons and blue warning lights added.

Inter-Township Fire Department

The Municipality of Meaford has had a long standing relationship with the ITFD, including having 25% ownership (Township of Georgian Bluffs has 75% ownership) and two council members out of six on the oversight board. ITFD provides primary fire coverage to the old Sydenham Township from its station on the west side of Owen Sound. While the review was not an in-depth look at the ITFD, it does look at the major issues facing the Municipality of Meaford.

Many of the recommendations identified throughout the report apply to both MDFD and ITFD and are noted herein.

Due to the station location and the size of the coverage area within the Municipality of Meaford, there is an extended response time into the Municipality. The best solution for the extended response time is a fire station within the western portion of the Municipality of Meaford.

To address response time challenges, ITFD firefighters respond directly to calls in their personal vehicles and wait for the responding apparatus. Responding in personal vehicles poses significant health and safety risks and therefore liability to the Municipality. It is recommended that this practice of responding in personal vehicles stop.

A challenge noted in the report is that the ITFD records fire department arrival on a scene when the first firefighter arrives, usually in their personal vehicle. Proper recording of response time is made from the time the first fire truck arrives. Therefore, response time statistics are not in line with standards and show a more rapid response time than the actual time a fire truck arrives.

In looking at ITFD response into the Municipality of Meaford, there were other issues identified which are addressed throughout the report including:

- Outdated Standard Operating Guidelines (many dated 2007 and 2008) which should be updated every three years.
- Lack of detailed record keeping (e.g. training records, fire prevention records).
- Lack of a fire prevention program directly targeting the Municipality of Meaford coverage area (e.g. smoke alarm program, public education).
- A Simplified Risk Assessment that combines the coverage area for the Municipality of Meaford with the Township of Georgian Bluffs.

As two fire departments are providing service within the Municipality, they should work at developing compatible Standard Operating Guidelines for dual response calls to ensure integrated fireground operations. Further, combined training sessions with the two fire departments should be scheduled to form an improved working relationship.

If the Municipality of Meaford decides to continue in the partnership to operate the Inter-Township Fire Department (ITFD), it is recommended that the ITFD establishes a station within the Municipality to improve response times and that the contract establishes a mechanism for the Municipality to monitor the operations and performance of the fire services provided within the community.

It is recommended that an independent firm conduct a thorough review and Master Fire Planning process for the Inter-Township Fire Department to identify current state, challenges, and opportunities.

The following recommendations are made to guide the Municipality of Meaford and its fire protection service(s) for the next 5 to 10 years.

Summary of Recommendations

Rec #	Section #	Recommendation	Estimated Costs	Suggested Timeline
Administration				
1	1.4	It is recommended that the Establishing and Regulating By-law be reviewed before Council at the beginning of each term. This will allow the Chief Administrative Officer and Fire Chief to keep abreast of change and allow Council members to be familiar with the scope and practice of the Fire Department. Newly drafted by-laws should be vetted by Municipal Solicitor, the Municipal Insurer, and a Program Specialist with the Office of the Fire Marshal and Emergency Management.	Staff time plus costs of legal review	Short-term (1 – 3 years) and with every new council
8	2.5	Any updates or renewals to aid agreements should be vetted by the Ontario Fire Marshal's Office and Emergency Management Specialist and the Municipal Solicitor.	Staff time plus costs of legal review	Short-term (1 – 3 years)
9	2.5	It is recommended that the incident reporting be outlined in a policy for both fire departments so that the reporting meets the intent of the Ontario Fire Marshal's Office and Emergency Management directions.	No identified costs other than staff time	
34	6.2	It is recommended that the Fire Chiefs review and update all Standard Operating Procedures (SOGs) and that all SOGs are reviewed and updated, as applicable, every three years.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review
35	6.1	It is recommended that additional fire department administrative support hours be allocated to increase from 3.5 hours per week to 15 - 21.5 hours per week and that the workload be monitored.	\$12,000 - \$18,000	Short-term (1 – 3 years) with annual review

40	7	It is recommended that the Fire Department management (for both departments), under the direction of the Chief Administrative Officer, should update job descriptions for each of the approved positions within the Establishing By-law. These job descriptions should include the required knowledge, training certifications, and experience to be compliant with the <i>Occupational Health and Safety Act</i> .	No identified costs other than staff time	Short-term (1 – 3 years) and ongoing
41	7	It is recommended that the Fire Department management (for both departments) produce a Standard Operational Guideline (SOG) that outlines the promotional processes within the Fire Department. These processes must consider the required NFPA standards based on the various positions within the Fire Department. This SOG should include supervision of the process by the Chief Administrative Officer to ensure compliance with legislative requirements under the <i>Employment Standards Act</i> .		
42	7	The promotional process, once defined and developed, should be vetted by a Human Resources Specialist or the Municipal Solicitor, to ensure compliance with the legal requirements and the processes already established in the Municipality.		
Health & Safety				
2	1.5	It is recommended that the current Joint Health and Safety Committees review the <i>Occupational Health and Safety Act</i> , its Regulations, and Section 21 Guidance Notes to ensure the committees and their functions are compliant with the required training and processes. This review should be conducted on at least an annual basis, or as required due to changes and additions to the Fire Department's operations.	Staff time plus costs of legal review	Short-term (1 – 3 years) and ongoing

23	4.5	The practice of firefighters responding to fire calls and motor vehicle collisions in their personal vehicles should be eliminated as it creates significant health and safety risks to the firefighters and liabilities to the Municipality.	No associated costs	Short-term (1 – 3 years)
24	4.5	Both Fire Departments must develop Standard Operating Procedures, based off Section 21 Guidance Notes #6-10 for responding to motor vehicle collisions.	No identified costs other than staff time	Short-term (1 – 3 years)
37	6.2	It is recommended to reference Section 21 Guidance Notes in the revisions and development of Standard Operating Guidelines.		Short-term (1 – 3 years) with annual review
43	7.4	It is recommended that all worker members complete the Worker Health and Safety Awareness in 4 Steps Program and all supervisors complete the Supervisor Health and Safety Awareness in 5 Steps Program.		Short-term (1 – 3 years) and ongoing
44	8.1	It is recommended that consideration be given to installing either an at source exhaust evacuation system or a ceiling system engineered to reduce the diesel particulates in the fire station.	\$50,000 - \$175,000 depending on the type of system installed	Short-term (1 – 3 years)
Operations				
3	2.4	It is recommended that a review be undertaken of incident response procedures (automatic dual station responses), response boundaries (closest station), and response activities to improve response performance and target the response time objectives as outlined in National Fire Protection Association (NFPA) 1720.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review, where applicable

4	2.4/2.5	It is recommended that a fire protection agreement be entered with the Chatsworth Fire Department, similar in design and cost recovery to the Grey Highlands Agreement, to provide initial response to a realigned boundary for the southwest area of the Municipality where Chatsworth is closer than Inter-Township Fire Department.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review, where applicable
22	4.3	It is recommended that a response boundary realignment occur between the Meaford & District Fire Department and Inter-Township Fire Department to ensure that the quickest response (usually closest station) is dispatched.	No identified costs other than staff time	Short-term (1 – 3 years)
25	4.5	The Meaford & District Fire Department should undertake a Water Tanker Shuttle Accreditation process.	\$5,000 fee plus associated staff time	Long-term (7 – 10 years)
26	4.5	It is recommended that the Municipality investigate placing cisterns and dry hydrants in the rural areas of the community to provide an emergency water source.	A large water cistern \$10,000 - \$20,000 depending on the size of the tank and earthworks required for installation. Dry hydrants \$5,000 - \$10,000 depending on the work required to install the dry hydrant as well as ensuring the surface is suitable for fire trucks.	Mid to long-term (4 – 10 years)

Western Station				
5	2.4	It is recommended that the Municipality establish a Fire Station in the western portion of the Municipality. A pumper / tanker and a light rescue truck should be placed at the new station.	A new station may range from \$800,000 - \$1,600,000 dependant on the type of construction	Start the process short-term (1 – 3 years) for operations mid-term (4 – 6 years)
			\$250,000 be budgeted for training and initial capital equipment	Mid-term (4 – 6 years)
			Pumper/tanker: \$650,000 Light rescue: \$150,000 Cost should be offset by either moving an ITFD truck over or the funds that would be owed to the Municipality by ITFD.	

Dispatch				
7	2.5	The dispatch protocols (e.g. closest station for response boundaries and stipulate automatic dual station calls for structure fires, etc.) for the Municipality should be reviewed and closely monitored for compliance.	No identified costs other than staff time	Short-term (1 – 3 years)
10	2.5	It is recommended that the dispatch agreement be amended to include appropriate standards such as call taking and dispatching times under National Fire Protection Association (NFPA) - 1221 – Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, and training requirements of the dispatcher to meet NFPA 1061 - Professional Qualifications for Public Safety Telecommunications Personnel.		
11	2.5	It is recommended that the Dispatch Agreement contain provision for the service provider to supply incident reports that outline the required data as noted in the Ontario Fire Marshal’s Office and Emergency Management reporting requirements at the conclusion of each event.		
Fire Prevention				
12	3	A single fire prevention/education program should be established for the entire Municipality to ensure consistency in a standard format. Conduct a comprehensive review and revision of the fire prevention policies and procedures to update existing practices and, where necessary, implement additional policies and/or procedures to assist staff in prioritizing work, sustain certification, and to ensure all programs and activities are delivered to customers in a consistent manner.	No associated costs beyond staff time	Short-term (1 – 3 years)

13	3.1	It is recommended that a single Simplified Risk Assessment/Community Risk Assessment be developed for the entire Municipality and that the Simplified Risk Assessment/Community Risk Assessment review be conducted every four (4) years, along with the Establishing By-law. The presentation of both documents to the newly sitting council, at the beginning of the council term, will allow the members to understand the scope of the Fire Department and the financial needs to sustain it. Upon completion of an updated Simplified Risk Assessment/Community Risk Assessment, the fire department should adjust the prevention and education programs, as required, to respond to the findings of the assessment, and the Fire Chief should recommend to Council the most appropriate Fire Prevention and Inspection Policy.	No identified costs other than staff time	Short-term (1 – 3 years)
14	3.2	It is recommended that a Fire Inspector(s) for the Municipality of Meaford be certified to the National Fire Protection Association (NFPA) 1031 (Level 1 minimum) with the Ontario specific training and appropriate training to deal with Vulnerable Occupancies. It is recommended that a formal delegation of power be presented to the Fire Inspector in accordance with the Fire Protection and Prevention Act (FPPA) 6(6), if the Fire Inspector is not the Fire Chief.		
15	3.2	All non-single-family residential building stock within the Municipality of Meaford should be assessed with the Integrated Risk Management tool, and that the Fire Chief(s) uses the data from the Integrated Risk Management tool to make changes to the Fire Prevention and Inspection Policy for Council to consider.		

16	3.6	It is recommended that the Meaford and District Fire Department and Inter-Township Fire Department move towards the training and certification of its Fire Officers in the areas of fire prevention and public education trained and certified to at least: NFPA 1031 – Fire Inspector I and NFPA 1035 – Fire and Life Safety Educator I.	Training of Fire Officers to NFPA 1031 – Fire Inspector I, and NFPA 1035 – Fire and Life Safety Educator I can be done in-house requiring staff time	Short-term (1 – 3-years)
17	3.5/3.6	It is recommended that the fire department utilize the records management system program to implement a process to track all prevention and education activities across the Municipality. This should include core programs such as the Home Smoke Alarm Program, distribution of fire safety education materials, and inspections.	No identified costs other than staff time	Short-term (1 – 3 years)
18	3.4	Those conducting Fire Safety Inspections and issuing Fire Inspection Orders within the Municipality of Meaford should receive the training necessary as provided by the Ontario Fire College. Note: Inter-Township Fire Department is not using the Fire Inspection Orders format and should move to the new standard.	Training costs for the Fire Prevention Officer/Inspector will be based on the qualifications and experience of the person hired to fill this position	Short-term (1 – 3 years)

19	3.6	It is recommended that the Municipality hire a full-time Fire Prevention Officer/Inspector with responsibility for the Fire Prevention Program for the entire Municipality. This person will be responsible for the updating of the Simplified Risk Assessment/Community Risk Assessment, implementing the Integrated Risk Management program, conducting inspections, fire code enforcement, fire investigations, coordinating public education programs, etc. across the Municipality.	Hiring a Fire Prevention Officer/ Inspector - \$75,000 plus benefits	Short-term (1 – 3 years)
20	3.7	Municipality of Meaford Fire Department(s) should investigate Home Fire Sprinkler Installation safety initiative as part of their fire prevention and public education initiatives, especially in the more rural areas and in residences designed for seniors.	No identified costs other than staff time	Short-term (1 – 3 years)
21	3.7	It is recommended that a stronger website and social media presence be investigated that would aid in providing greater detail to the residents and visitors within the Municipality of Meaford.	No identified costs other than staff time	Short-term (1 – 3 years)
39	6.4	It is recommended that when a fire event occurs within the Municipality, media releases are provided through various platforms that explain the situation as well as how others can avoid the same event at their own home. To assist in this process, a Standard Operating Guideline should be developed outlining where the responsibility lies in providing informational releases, and that appropriate training be given to those responsible.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review
Training				
27	5.1/5.4	It is recommended that the Meaford and District Fire Department appoint Platoon Training Instructors for each Platoon and that the instructors be certified at a minimum as a Fire Service Instructor Level 1 (NFPA 1041).	Additional stipend for three Training Instructors may range from \$6-\$18,000	Short-term (1 – 3 years)

28	5.1	It is recommended that the fire departments focus on completing training to a certified level.	All training comes with the cost of hourly wages for those attending. There may be costs for training and expenses if the program is remote or contracted externally.	
29	5.1/5.2	It is recommended that for skills maintenance training, Job Performance Requirements become the focus in a scenario-based model for each firefighter level, up to and including their current rank and position and this documentation be kept on file.		
30	5.1	To verify in a more formal manner that the Training Program is meeting the related National Fire Protection Association program recommendations, the training staff should identify: a) What training programs are required in relation to the services that the fire departments are providing; b) The number of hours that are required to meet each of those training needs; c) Resources required to accomplish this training; d) Joint partnerships with bordering fire departments and private organizations/colleges that can be entered into to achieve the training requirements; and e) An annual program outline at the start of each year to the Fire Chief, with noted goals and expectations, which are measured and reported on in relation to completion success rate at the end of each year.	No identified costs other than staff time	Short-term (1 – 3 years)

31	5.1	Develop Standard Operating Guidelines that outline the process to receive training along with training expectations and the requirement for detailed training records.	No identified costs other than staff time	Short-term (1 – 3 years)
32	5.3	It is recommended that all promotions into an officer level be consistent with the National Fire Protection Association standards and local Standard Operating Guidelines.		
33	5.4	It is recommended to keep detailed training records for both fire departments in a records management system.		
38	6.4	It is recommended that all firefighters receive customer service training that can help them relate to the customers they serve.		Short-term (1 – 3 years) with annual review
Vehicles				
45	9	Budget for the replacement of the aerial truck no later than 2020 with ordering to take place in 2019. Although the truck exceeds its 20-year recommended frontline role, it is reported to be in good condition and regularly maintained to ensure its safe and reliable function. Therefore, to give the Municipality additional time to fund the truck, we have recommended replacement in 2020, if it remains safe and operational. An option is to investigate the possibility of a fire service agreement for the use of neighbouring municipality’s aerial apparatus – but caution is to be used as there is no guarantee that the units will be available when needed and will have a delayed response.	An aerial truck will be approximately \$1,000,000. Previously owned trucks that are 12-15 years old may be purchased for \$100,000-\$250,000	An aerial truck should be ordered in 2019 with delivery planned for 2020.
46	9	It is recommended that funds be made available for the safety features on the fire apparatus including ensuring all apparatus have chevrons on the rear and that blue emergency lighting be added.	\$20,000 - \$25,000	Short-term (1 – 3 years)

47	9	Replace the current command pick-up truck and utilize the current vehicle in a primarily non-emergency capacity for the Fire Prevention Officer to conduct the FPO responsibilities.	\$75,000	2019
ITFD				
6	2.5	The Municipality, along with the Township of Georgian Bluffs, should have an independent firm conduct a thorough review and Master Planning Process for the Inter-Township Fire Department.	\$45 - 50,000 shared between the two municipalities	Short-term (1 – 3 years)
36	6.2	It is recommended that a committee be struck involving firefighters and officers from both fire departments to guarantee that Standard Operating Procedures related to fire ground operations and any dual response calls within the Municipality are compatible ensuring integrated operations. This process should be directed by the Fire Chiefs with the final version provided to the Chief Administrative Officer.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review

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Project Overview

Purpose

This Master Fire Plan was developed to provide strategic direction to the Municipality of Meaford to help shape the future course of its fire service over the next ten years. Having a comprehensive strategic plan assists in the planning and operations of the fire service to ensure that decisions and initiatives undertaken year-by-year lead to the established vision for the Department.

Review Process and Scope

Emergency Management & Training Inc. (EMT) has based its review process on the Municipality's initial Request for Proposal (RFP) and the response document submitted by EMT. EMT follows an established process to systematically and comprehensively assess the current status of the fire service and to ensure that all appropriate factors are considered in developing a master plan.

Within the initial RFP, there were 14 specific areas that were to be reviewed by utilizing best practices, current industry standards, and applicable legislation as the foundation for all work undertaken. EMT also incorporated both quantitative and qualitative research methodologies to develop a strong understanding of current and future needs and circumstances of the community, as well as customer service expectations of the public.

The review included, but was not limited to the following key areas:

- a) Governance
- b) Service Delivery
- c) Fire Prevention
- d) Public Fire Safety Education Programs
- e) Emergency Response
- f) Firefighter Training
- g) Administration
- h) Finance
- i) Human Resources
- j) Facilities
- k) Apparatus and Equipment
- l) Maintenance Program
- m) Communications
- n) Emergency Management Program

Our review process included consultation with the firefighters, as well as meeting with the Fire Chief of the Meaford & District Fire Department and the Acting Chief of the Inter-Township Fire

Department. Meetings were held with the Mayor and Council Members as well as the Action CAO, Clerk/Director of Legislative Services, and Director/Treasurer of Financial Services and Infrastructure Development. An external survey to seek input from members of the community was also conducted and a community stakeholder meeting was held on September 25, 2018.

All the input was collated and incorporated into this Master Plan document. Based on these criteria and through the noted meetings with the stakeholders, the consulting team was able to complete a thorough review of efficiencies as well as areas that require improvement within the Municipality of Meaford fire services.

During the program review, the consulting team assessed staffing, fire facilities, vehicles, and related operations. Data provided by the fire departments was also reviewed in relation to all the previously noted items contained in the Municipality's request for proposal (RFP).

Based on the review of the Fire Department's facilities, equipment, programs, and related data, EMT is submitting a total of 47 recommendations that can be implemented, in whole or in part, by the Municipality as it sees fit. All these recommendations include time and cost estimates as noted in the recommendations chart located in the Executive Summary as well as throughout each section of this document.

Performance Measures and Standards

This FMP has been based upon (but not limited to) key performance indicators that have been identified in national standards and safety regulations such as:

- The Ontario Fire Marshal's Office and Emergency Management (OFMEM) Public Fire Safety Guidelines.
- *The Fire Prevention and Protection Act* and its subordinate regulations, including the Ontario Fire Code O. Reg 213/07, Mandatory Assessment of Complaints and Requests for Approval O. Reg 365/13, and Mandatory Inspection – Fire Drill in Vulnerable Occupancy O. Reg 364/13.
- The National Fire Protection Association (NFPA) standards:
 - NFPA 921 – Guide for Fire and Explosion Investigations
 - NFPA 1001 – Standard for Fire Fighter Professional Qualifications
 - NFPA 1002 – Standard for Fire Apparatus Driver/Operator Professional Qualifications
 - NFPA 1021 – Standard for Fire Officer Professional Qualifications
 - NFPA 1031 – Standard for Professional Qualifications for Fire Inspector and Plan Examiner
 - NFPA 1033 – Standard for Professional Qualifications for Fire Investigator

- NFPA 1035 – Standard on Fire and Life Safety Educator, Public Information Officer, Youth Fire Setter Intervention Specialist and Youth Fire Setter Program Manager Professional Qualifications
 - NFPA 1041 – Standard for Fire Service Instructor Professional Qualifications
 - NFPA 1061 - Professional Qualifications for Public Safety Telecommunications Personnel
 - NFPA 1072 – Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications
 - NFPA 1201 – Standard for Providing Fire and Emergency Services to the Public
 - NFPA 1221 – Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems
 - NFPA 1500 – Standard on Fire Department Occupational Safety, Health, and Wellness Program
 - NFPA 1521 – Standard for Fire Department Safety Officer Professional Qualifications
 - NFPA 1720 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments
 - NFPA 1730 – Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations
 - NFPA 1901 – Standard for Automotive Fire Apparatus
 - NFPA 1911 – Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Emergency Vehicles
- The Commission on Fire Accreditation International: a program that evaluates a fire department based on related NFPA standards, local legislation, and industry best practices (the parent organization for CFAI is the Centre for Public Safety Excellence (CPSE)).
 - Office of the Fire Marshal and Emergency Management's (OFMEM) Integrated Risk Management program.
 - The *Ontario Health and Safety Act*, with reference to the National Institute for Occupational Safety and Health (NIOSH).
 - Ontario Fire Service – Section 21 Guidelines:
 - The Section 21 Committee is based on Section 21 of the *Ontario Occupational Health and Safety Act*. This committee is charged with reviewing industry safety

concerns and developing recommended guidelines to reduce injuries for the worker.

Project Consultants

Although several staff at Emergency Management and Training Inc. were involved in the collaboration and completion of this Plan, the overall review was conducted by:

- Darryl Culley, President, Emergency Management and Training Inc.
- Richard Hayes (CFO), Fire & Emergency Services Consultant
- Lyle Quan (CFO), Fire & Emergency Services Consultant

Together, the team has amassed a considerable amount of experience in all areas of fire and emergency services program development, review, and training. The EMT team have worked on projects that range from fire service reviews, creation of strategic and master fire plans, and development of emergency response programs for clients.

SECTION 1: Community and Fire Department Overview

- 1.1 Community
- 1.2 Fire Services
- 1.3 Municipal Responsibilities
- 1.4 Establishing & Regulating By-law
- 1.5 Joint Health & Safety Committee
- 1.6 National Fire Protection Association (NFPA) Guidance
- 1.7 Strengths, Weaknesses, Opportunities, and Threats

Section 1: Community and Fire Department Overview

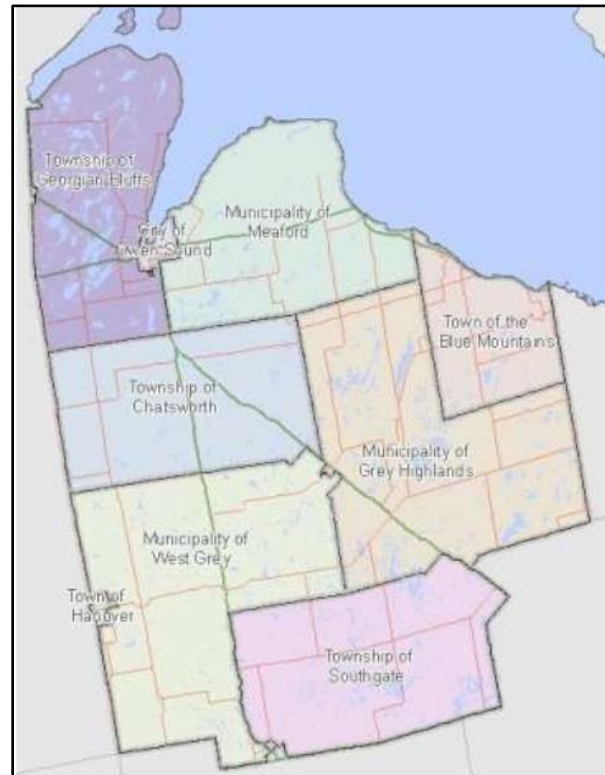
When conducting a community and fire department review, several items are reviewed, such as present population, geography, and future growth. When all this information is reviewed and assessed in relation to the Council approved mandate of the fire department, a set of recommendations can be presented and considered for implementation.

1.1 Community

The Municipality of Meaford is a community of approximately 11,000 people in Grey County with a land mass of 588.6 square kilometers. The average density is approximately 19 people per square kilometer (48 people per square mile).

Meaford is situated on the southern shore of Georgian Bay with the Town of Blue Mountain to the east, Grey Highlands and Chatsworth to the south, and Georgian Bluffs and Owen Sound to the west. Due to the location on Georgian Bay, the community sees a regular influx of visitors and increase of traffic in the summer months.

Canadian Forces Base (CFB) Meaford (4th Canadian Division Training Division) is a year-round military training facility located in the northeast of the community and brings an influx of military traffic, which often increases in the summer for the training of reserve units.



Council's Community Vision

The Municipal Council's strategic priorities for 2015-2018 identify the following statements:

- Vision: THE place to be on southern Georgian Bay.
- Mission: Provide leadership and effective guidance in the delivery of quality, sustainable services.
- Values: Respect – Inclusive, Open, and Empathetic
Integrity – Honest, Ethical, and Accountable
Community – Common Good, Resilient, and Authentic

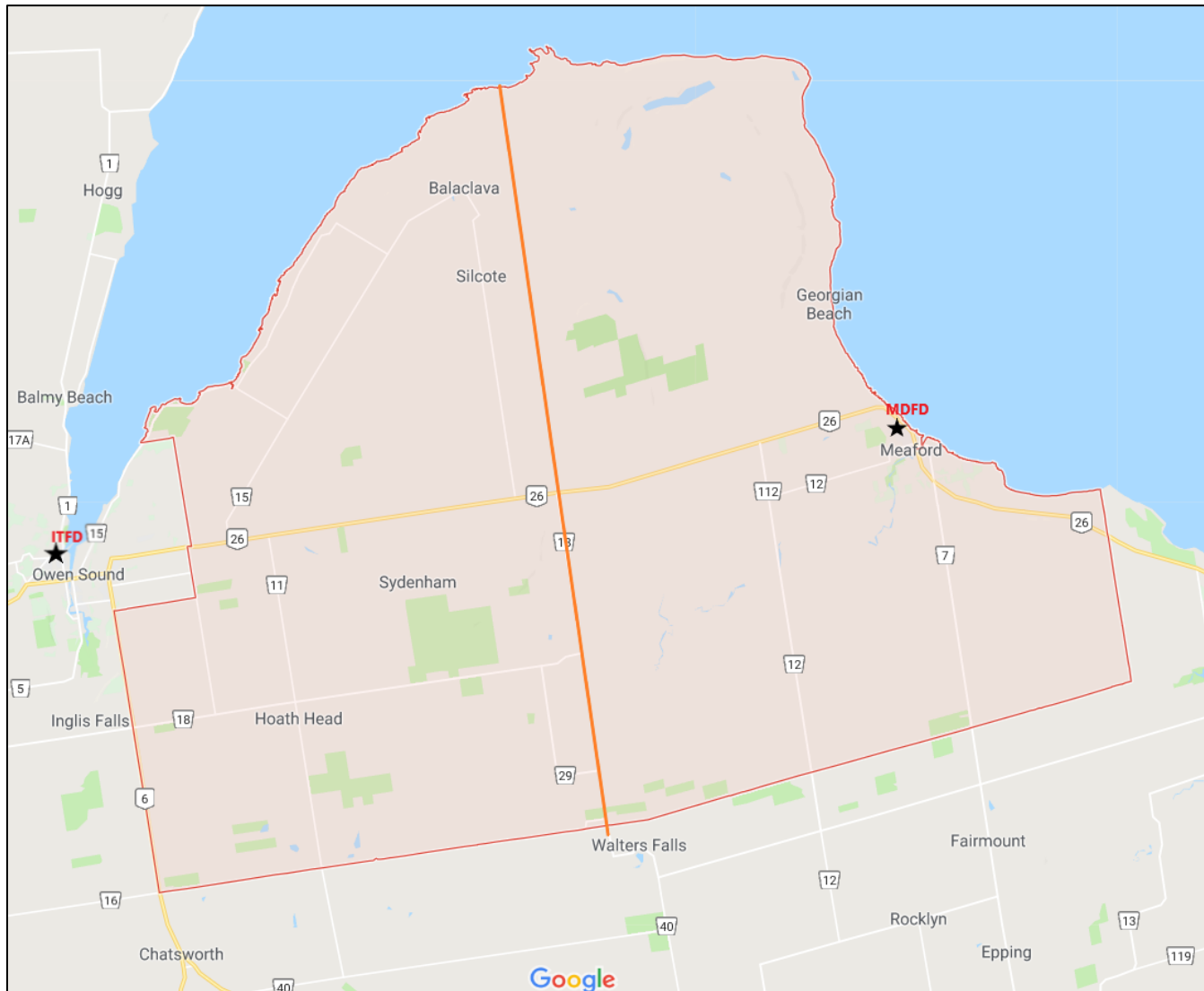
Future Description: The Municipality of Meaford is a welcoming and authentic community; safe, accessible, active, vibrant, and green. It is a place we proudly call home where we celebrate our culture, heritage, and natural beauty. We are a “community of communities” with sustainable and progressive development in the residential, agricultural, commercial, and tourism sectors and a bustling downtown.

1.2 Fire Services

The Municipality of Meaford is served by two fire departments covering an area of approximately 588.6 square kilometres and serves a population of approximately 11,000 residents, with a regular influx of visitors primarily in the summer months. The Municipality directly operates the Meaford & District Fire Department and has established the Inter-Township Fire Department in Owen Sound through a Joint Board of Management with the Township of Georgian Bluffs.

The Fire Department response boundaries are currently based on the old township boundaries between Meaford and Sydenham before the two were amalgamated into the Municipality of Meaford.

Figure 1.1: The Municipality of Meaford Response Boundaries and Approximate Fire Station Locations



There are agreements with the neighboring municipalities that enable the Municipality to provide and receive additional fire protection where needed.

The growth forecast indicates a continued growth in population into the year 2031. There are two areas of potential residential development within the Municipality, one of which is focused on seniors. If these properties establish development, a careful monitoring of call volumes, call types, and response times would become critical to determine if the Fire Service is keeping up with its response expectations.

In 2017, the two fire departments responded to 213 calls within the Municipality.

NFPA Standard 1201 – Standard for Providing Fire and Emergency Services to the Public

This standard notes in Section 4.3.5 – The Fire and Emergency Services Organization (FESO) shall provide customer service-oriented programs and procedures to accomplish the following:

1. Prevent fire, injuries, and deaths from emergencies and disasters
2. Mitigate fire, injuries, deaths, property damage, and environmental damage from emergencies and disasters
3. Recover from fires, emergencies and disasters
4. Protect critical infrastructure
5. Sustain economic viability
6. Protect cultural resources

To accomplish this, a FESO must ensure open and timely communications with the CAO and governing body (Council); create a master plan for the organization; ensure there are mutual aid, automatic aid programs, and fire protection agreements in place, along with an asset control system and maintenance program.

In the Municipality of Meaford, this would apply to both the directly operated fire service as well as the contracted fire service in which the Municipality has partial ownership.

1.3 Municipal Responsibilities

It is important to note that it is Council that sets the level of service within the community. The *Fire Protection and Prevention Act*, 1997, S.O. 1997, c. 4, outlines the responsibilities of a municipality, providing a framework for protecting citizens from fire:

2. (1) Every municipality shall,

- (a) Establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention; and
- (b) Provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.

Further, the *Act* provides a description for the methods of providing services;

Methods of Providing Services

(2) In discharging its responsibilities under subsection (1), a municipality shall:

- (a) Appoint a community fire safety officer or a community fire safety team; or
- (b) Establish a Fire Department.

The Municipality of Meaford has established a Fire Department as outlined in Section 2.2(b) of the *Fire Protection and Prevention Act*, 1997, S.O. 1997, c. 4, as well as participating in the establishment of a fire protection board that provides fire service in the western portion of the Municipality.

The level of service that therefore must be provided is further outlined in Section 2.1(b) of the *Act*. The level of service to be provided is determined by the needs and circumstances of the community and can be derived from conducting a Fire Master Plan for Council. The ‘needs’ can be defined by the type of buildings, infrastructure, and demographics of the local area which in turn can be extrapolated into the types of services that would be offered and needed through a simplified risk assessment and/or community risk assessment. The ‘circumstances’ are considered the ability to afford the level of service to be provided.

Together, the needs and circumstances assist in identifying a level of service for the community. This combination meets the expectations of the public for safety and the affordability of this level provided.

1.4 Establishing & Regulating By-law

Meaford and District Fire Department E&R By-law 2018-48

By-law 2018-48 is the existing Establishing and Regulating By-law for the Meaford & District Fire Department. A draft updated E&R By-law was shared for review and is outlined below. The purpose of reviewing this current By-law is to provide some guidance in ensuring certain updates are captured for the new By-law.

The definition of Fire Protection Services in the by-law is outdated with that of the *Fire Protection and Prevention Act*. The definition with the Municipality’s By-law is missing the component of the Carbon Monoxide mitigation and prevention and should be added. The definition within the *Act* states:

“*fire protection services*” includes:

- a) fire suppression, fire prevention and fire safety education,
- b) mitigation and prevention of the risk created by the presence of unsafe levels of carbon monoxide and safety education related to the presence of those levels,

- c) rescue and emergency services,
 - d) communication in respect of anything described in clauses (a) to (c),
 - e) training of persons involved in providing anything described in clauses (a) to (d),
- and
- f) the delivery of any service described in clauses (a) to (e).

Section 3.2 of the by-law states that the Fire Chief is responsible to Council through the Legislative & Protective Services, its Director, and the Chief Administrative Officer for ... fire protective services.

Section 6. (3) of the *Fire Protection and Prevention Act* states, “A fire chief is the person who is ultimately responsible to the council of a municipality that appointed him or her for the delivery of fire protection services.” While it is common in municipalities to have a Fire Chief report to a CAO or Commissioner/Director for daily management of the fire department, there must be clear lines of communication for the Fire Chief to Council in relation to the delivery of fire protection services. In the current wording, the Fire Chief, being two tiers below Council, would not have a clear voice to Council for the delivery of Fire Protection Services. Missed information and opportunity for dialogue with the Fire Chief could lead Council into decision making that may not be best for the Municipality. It is recommended that the wording within the Municipality’s document should be changed to comply with legislation.

Section 3.4 provides the ability of the Fire Chief to appoint a station commander, captain(s), lieutenant(s), and firefighters. It is important to remember that in attaining a firefighter/officer position are the requirements of a Competent Worker under the Occupational Health & Safety Act.

Section 3.7 outlines the necessity to follow the approved hiring policies and guidelines of the Municipality of Meaford. The hiring of firefighters is different than that of hiring other positions within the Municipality. While the main components would be the same, there are specifics that should be included in the policy.

It is important that the candidate be properly vetted in numerous levels prior to being offered a position. These levels include physical, physiological, and behavioral skills that are specific to the fire service. There are significant risks associated with the service that include PTSD, cancer, and musculoskeletal issues, to name a few. Early vetting may aid the Municipality in diminishing costs associated with WSIB claims.

The greater concern is to prevent a person from significant pain and suffering from being exposed to something they are not geared to properly handle. While this seems counterintuitive in that volunteer fire departments are constantly looking for new members, it is important to ensure the hiring of the people who can pass these specific job-related tests and to forgo those who cannot.

The *Fire Protection and Prevention Act* Section 5 does allow for the establishment of more than one fire department, in that it states:

Municipalities may establish fire departments

5. (0.1) The council of a municipality may establish, maintain and operate a fire department for all or any part of the municipality. 2001, c. 25, s. 475 (2).

Fire departments

5. (2) Subject to subsection (3), the council of a municipality may establish more than one fire department for the municipality. 1997, c. 4, s. 5 (2).

5. (3) The council of a municipality may not establish more than one fire department if, for a period of at least 12 months before the day this *Act* comes into force, fire protection services in the municipality were provided by a fire department composed exclusively of full-time firefighters. 1997, c. 4, s. 5 (3). (*note: this exception in 5. (3) does not apply to the Municipality of Meaford*).

It is recommended that any rewrite to the Establishing and Regulating By-law be vetted by the Municipality's Legal Counsel, the Municipal Insurer, and by the Program Specialist with the OFMEM.

Further consideration should be given to response time goals that meet the NFPA 1720 - *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Volunteer Fire Departments*. Additional information regarding this subject can be found in *Section 2: Service Delivery*.

Further, it is recommended that the Establishing and Regulating By-law be reviewed by Council at the beginning of each term. This process will allow the CAO and Fire Chief to keep abreast of change and allow Council members to be familiar with the scope and practice of the Fire Service(s). This understanding is especially useful for Council when considering budgets.

1.5 Joint Health & Safety Committee

It is important to have a well-entrenched health and safety culture as the Municipality, and specifically, the Fire Departments, practice activities safely on a regular basis. The Canadian fire service, in its history, is generally very health and safety conscious. The *Ontario Occupational Health and Safety Act* outlines the necessity of having a Joint Health and Safety Committee (JHSC). Both Fire Chiefs have reported that they have established JHSCs for their departments. The *Act* outlines the requirements for training, meeting, reviewing, reporting, posting, and other activities. It would be incumbent upon each of the Committees to review the requirements under the *Act* and ensure they are compliant. This review should be conducted on at least an annual basis, or as required due to changes and additions to the Fire Department's operations.

1.6 National Fire Protection Association (NFPA) Guidance

In 2014, the Province of Ontario adopted to move to the NFPA Standards away from the Ontario Fire Service Standards. To assist with EMT's review and related recommendations, reference has been made to the National Fire Protection Association Standards, which are viewed as the Provincial and the North American benchmark for fire services.

NFPA Standard 1201 – Standard for Providing Fire and Emergency Services to the Public

Section 4.3.5 notes:

- The Fire and Emergency Services Organization (FESO) shall provide customer service-oriented programs and procedures to accomplish the following:
 1. Prevent fire, injuries and deaths from emergencies and disasters
 2. Mitigate fire, injuries, deaths, property damage, and environmental damage from emergencies and disasters
 3. Recover from fires, emergencies and disasters
 4. Protect critical infrastructure
 5. Sustain economic viability
 6. Protect cultural resources

To accomplish this, a FESO must ensure open and timely communications with the CAO and governing body (Council/Board); create a master plan for the organization; and ensure there are mutual aid and automatic aid programs in place along with an asset control system and maintenance program.

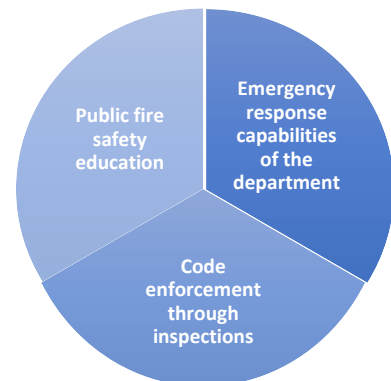
To provide the Fire Departments clearer focus on what the ultimate goals for emergency response criteria are, the NFPA suggests that response times should be used as a primary performance measure in fire departments. This is where NFPA 1720, which refers to goals and expectations for volunteer fire departments, needs to be considered (see *Section 2.4*).

Three Lines of Defence

The Office of the Fire Marshal and Emergency Management (OFMEM) have identified “Three Lines of Defence” to be utilized by all fire departments in Ontario when planning to meet the needs of the community.

The identified three lines of defence, as noted by the OFMEM are:

1. **Education** – Fire safety education is the key to mitigating the fire and life hazards before they start. With the growth of the community, how will the



municipality continue to meet the fire safety educational needs of the community?

2. **Inspections and Enforcement** – If the public education program does not prove effective, then the next step is for the fire department to enforce fire safety requirements through inspections leading to possible charges under the *Act*.
3. **Emergency Response** – If the first two lines of defence fail for whatever reason, the community, through its fire department, should be prepared to respond in an efficient and effective manner to put the fire out and/or mitigate the emergency itself. By evaluating the effectiveness of the fire stations, staff, and equipment, this report will be able to make recommendations for related efficiencies.

Based on these three lines of defence, the following strengths, weaknesses, opportunities, and threats were identified:

1.7 Strengths, Weaknesses, Opportunities, and Threats

The Master Plan document is the result of conducting a SWOT (strengths, weaknesses, opportunities, and threats) Analysis on the community which has resulted in a list of recommendations for the Municipality's Council, CAO, and Fire Chief to consider and implement.

The strengths and weaknesses portion of a SWOT Analysis are based on an internal review that categorizes elements working well versus identified areas for improvement. On the other hand, the opportunities and threats portion are related to external influences and how these influences affect the operations and response capabilities of the department. These will be discussed in more detail throughout the report.

As a starting point, this review has identified the following key SWOT themes:

Strengths

The Municipality benefits from having dedicated, paid on-call firefighters for responding to emergencies.

The Meaford and District Fire Department has a wide-ranging training program and an excellent training facility that has been built and continues to be enhanced by the firefighters. While there is a strong base for the training program, Section 5.1 will address opportunities for improvement.

The Meaford and District Fire Department is very proactive within the community in relation to public education and the dissemination of information.

The Fire Department has a team of firefighters trained in confined space and high angle rescue which serves the municipal workers in their functions. This expertise could be called

upon in an emergency.

Weaknesses

The Municipality is served by two fire departments - one in the suburban core of the Municipality of Meaford and one on the west side of Owen Sound. The fire station placements leave a large portion of the Municipality with long response times for fire apparatus.

Using paid on-call firefighters is a highly cost-effective method of providing fire response. However, due to other commitments, such as full-time jobs and family, there is no guarantee of the numbers of firefighters that will be available to respond as required.

Fire code enforcement and inspections have been a disjointed process with two different fire departments having responsibilities in the Municipality without a single point of accountability. Further, there has been limited staffing for fire prevention including code enforcement and inspections beyond the minimum legislated requirements. The lack of a consistent Fire Prevention Program across the Municipality was a major focus of the OFMEM review concern in not meeting the legislated requirements.

Opportunities

Establishing automatic aid and fire service agreements allows the Municipality to work with neighbouring fire departments to ensure the closest fire service response covering those areas on the boundaries of the Municipality. Continued active planning and cooperation with neighbouring municipalities is a cost-effective option for such things as arrangements for automatic aid and fire service agreements.

Enhanced fire prevention programming including public education and fire/ building code enforcement can serve to reduce the number of fires and their impacts when they occur. This is particularly important due to the aging demographics of the Municipality and in the rural areas where there may be extended response times. More on this topic will be detailed in Section 3.

Working closely with the emergency medical services, there may be opportunity to reduce the fire department response to non-life-threatening calls and those where the paramedics have a faster response time. More on this topic will be noted in Section 4.2.

There is a contingent of firefighters trained in confined space and high angle rescue. This is a valuable tool and could be offered as a fire service agreement to area departments lacking this skillset.

Threats/Challenges

Recruitment of on-call firefighters is a challenge being faced by the Fire Department due to the community's aging population. While using paid on-call firefighters is a highly cost-effective method of providing fire response, there is no guarantee of enough firefighter attendance due to the nature of their on-call position.

Longer response times of fire apparatus to emergency calls in the rural portions of the Municipality is a challenge due to distance travelled. Increasing fire prevention activities in rural areas can help citizens reduce fire risks and take appropriate actions (e.g. evacuation) in the even of an emergency.

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
1	It is recommended that the Establishing and Regulating By-law be reviewed before Council at the beginning of each term. This will allow the Chief Administrative Officer and Fire Chief to keep abreast of change and allow Council members to be familiar with the scope and practice of the Fire Department. Newly drafted by-laws should be vetted by Municipal Solicitor, the Municipal Insurer, and a Program Specialist with the Office of the Fire Marshal and Emergency Management.	Staff time plus costs of legal review	Mid-term (4 – 7 years) and with every new council
2	It is recommended that the current Joint Health and Safety Committees review the <i>Occupational Health and Safety Act</i> , its Regulations, and Section 21 Guidance Notes to ensure the committees and their functions are compliant with the required training and processes. This review should be conducted on at least an annual basis, or as required due to changes and additions to the Fire Department's operations.	Staff time plus costs of legal review	Short-term (1 – 3 years) and ongoing

SECTION 2: Service Delivery

- 2.1 Consultation
- 2.2 Service Delivery Model
- 2.3 Fire Suppression/ Emergency Response
- 2.4 NFPA 1720
- 2.5 Fire Protection Agreements

Section 2: Service Delivery

Services provided by a community's fire department create the foundation for training and performance reviews. A fire department receives its level of service from its Council. As such, it is worth conducting a review of both internal and external stakeholders on how the fire department is meeting stakeholder expectations relating to response time goals and fire safety for the community.

2.1 Consultation

Stakeholder Consultation

Stakeholder meetings, along with surveys, were conducted to receive feedback from both internal and external stakeholders. These meetings and surveys are an important part of conducting a review of the organization and offering some future focus based on customer input.

Stakeholder meetings were held with the Mayor and Council members, Acting CAO, Director of Finance, fire chiefs from both MDFD and ITFD, firefighters at MDFD, fire officers at MDFD, as well as an online survey for the firefighters of both departments.

Surveys were also provided to the firefighters who wanted to provide additional information or who were unavailable to attend the stakeholder meetings.

An electronic survey for the public was posted on the Municipality website and advertised locally.

Internal Consultation

During the MFP process, feedback was gathered from internal staff, which included firefighters, administration, and the CAO. The questions that were asked of staff were designed to be of a general nature so as not elicit a biased response. A copy of the questions asked can be found in the appendices.

The MDFD internal staff shared the following key points as their top four services that should be offered to the community:

1. Firefighting
2. Medical Assist and Response
3. Fire Prevention and Public Education
4. Rescue (i.e. motor vehicle collisions)

The ITFD internal staff shared the following key points as their top four services that should be

offered to the community:

1. Firefighting
2. Rescue (i.e. motor vehicle collisions)
3. Hazardous Materials and Technical Rescue
4. Fire Prevention and Public Education

For future expectations, challenges and recommendations, internal staff (firefighters) noted:

- Improving response times was the primary issue identified by firefighters from ITFD.
- Firefighter recruitment and retention was the primary issue identified by firefighters from MDFD, but also high on the list for ITFD firefighters.
- The number of firefighters on scene during daytime calls was identified as a concern of firefighters from both departments.
- Firefighters from both departments identified the working relationship between MDFD and ITFD as a challenge.

External Stakeholder Consultation

During the MFP process, a public meeting and an online survey were utilized to gather feedback from the community.

Of the online survey respondents, 68% identified having the MDFD as the primary fire department in their area, 22% identified the ITFD, and the remainder were unsure with several stating that they did not know more than one fire department served the community.

Ranking of priorities indicated the following as being the most important:

1. How quickly the Fire Department gets to me if I have an emergency
2. Continued and relevant training to meet the needs of the community
3. How well the Fire Department works with other agencies to provide wider community safety services

The following are the top four services identified as being preferred by the external stakeholders:

1. Firefighting
2. Rescue (i.e. motor vehicle collisions)
3. Medical assist and response
4. Fire prevention and safety inspections

Other comments received as a concern by the external respondents:

- Response times to rural areas was mentioned as a concern numerous times in the narratives.
- Several respondents expressed a concern that there was not a fire station located in the western portion of the community (Sydenham) with three asking why the Owen Sound Fire Department did not respond to their area as it is closer than ITFD.
- Having an adequate number of firefighters was identified as an issue.

Comments both supported and opposed the cost of the fire services, with many stating the fire department budget should be increased, while others thought that the cost was too high. Overall, both internal and external input noted a strong level of confidence in the Fire Department and senior management.

External Stakeholder Public Meeting

On September 25, 2018, a stakeholder meeting was held for those who, when completing the online survey, expressed a willingness to participate in a focus group.

While the attendance numbers were low (two members of the community attended), those who did attend supplied EMT with some very solid input. One of the community members did not know that two fire departments covered the Municipality, which also reflected several comments from the surveys. Both participants felt that the community is very supportive of the fire department.

2.2 Service Delivery Model

As previously noted, the Municipality of Meaford is served by two fire departments that cover an area of approximately 588.6 square kilometres and serves a population of approximately 11,000 residents. The Municipality directly operates the Meaford & District Fire Department and has established the Inter-Township Fire Department in Owen Sound through a Joint Board of Management with the Township of Georgian Bluffs.

Both Fire Departments utilize paid on-call firefighters. When paged, MDFD firefighters attend the fire station to staff a fire truck and respond to the scene. When a call comes into the Sydenham area, the ITFD firefighters in the community respond directly to the call in their personal vehicles while assigned firefighters living in or near Owen Sound attend the fire station to pick up the firetrucks. The remainder of the ITFD firefighters respond to the call from Georgian Bluffs.

The MDFD has one full-time Fire Chief and .10 FTE administrative support that is assigned 3.5 hours per week for the fire department. ITFD has a full-time Fire Chief and Deputy Chief.

2.3 Fire Suppression/Emergency Response

To provide the Fire Department clearer focus on what the ultimate goals for emergency response criteria are, the National Fire Protection Association (NFPA) 1720 suggests that response times should be used as a primary performance measure in fire departments.

When considering the response times and related needs for a community, the fire response curve (FIGURE 2.1) presents the reader with a general understanding of how fire can grow within a furnished residential structure over a short period of time.

Figure 2.1: Fire Response Propagation Curve

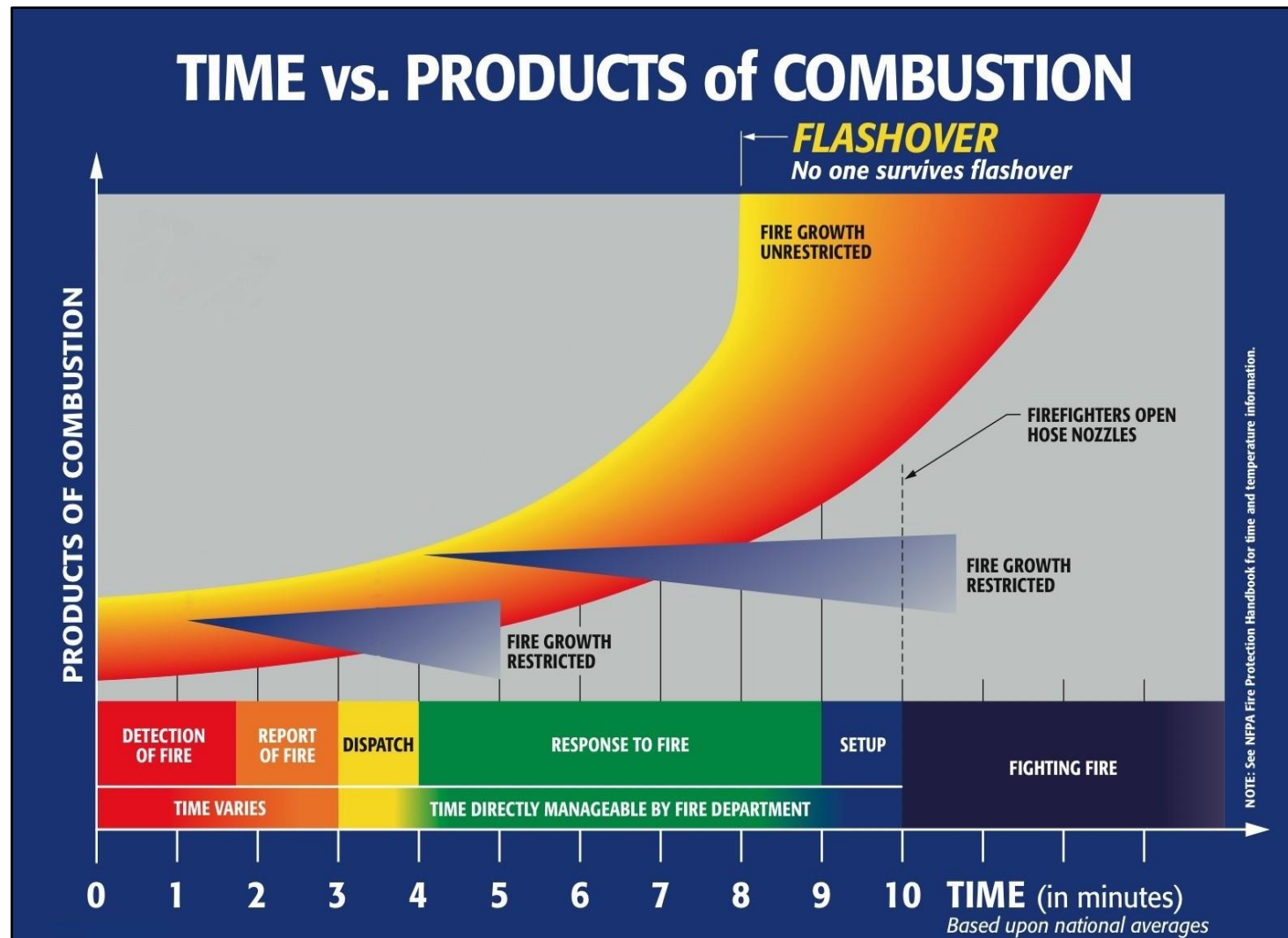


FIGURE 2.1 illustrates the following time variables:

- DETECTION OF FIRE – this is the time where the occupant discovers a fire. The fire may be in a very early stage or could have been burning for quite some time before being detected.
- REPORT OF FIRE – this is the time that someone has identified the fire and is calling 9-1-1 for help.
- DISPATCH – the time it takes the dispatcher to receive the information and dispatch the appropriate resources.
- RESPONSE TO FIRE – response time is a combination of the following:
 - Turnout time – how long it takes the firefighters to get to the fire station to respond on the fire truck.
 - Drive time – the time from when the crew advises dispatch that they are responding, until the time that they report on scene.
 - Response time – derived from the first arriving fire apparatus.
- SETUP – the time it takes for the fire crews to get ready to fight the fire.
- FIGHTING FIRE – actual time on scene it takes to extinguish the fire.

Depending on many other factors, the rate of growth can be affected in many ways. These multitude of ways can increase the burn rate or suppress it through fire control measures within the structure.

When we look at the response time of a fire department, it is a function of various factors including, but not limited to:

- The distance between the fire station and response location
- The layout of the community including its road network
- Impediments such as weather, construction, traffic jams, lack of direct routes (rural roads)
- Notification time
- Assembly time of the firefighters, both at the fire station and at the scene of the incident
 - Assembly time includes dispatch time, turnout time to the fire station, and response to the scene. Assembly time can vary greatly due to weather and road conditions, along with the time of day as many firefighters are at their full-time jobs and cannot respond to calls during work hours.

As illustrated in *FIGURE 2.1 - Fire Response Propagation Curve* (or any other related diagram or fire spread data), it is critical to initiate fire suppression activities as soon as possible.

Keep in mind that the Municipality's fire departments respond to more than just fires. For example, motor vehicle collisions can create a medical or fire emergency that needs to be dealt as soon as possible, hence, the reason to be as efficient and effective as possible in responding

to calls for assistance.

2.4 NFPA 1720 - Standard for the Organization and Deployment of Fire ... Operations to the Public by Volunteer Fire Departments

What determines the benchmark for response times within the Municipality of Meaford? NFPA 1720 provides the following table outlining response time needs for various demand zones. The highlighted section denotes the area that fits most of the Municipality populated areas and historical call locations. There are also areas of protection that are within the “remote” zone.

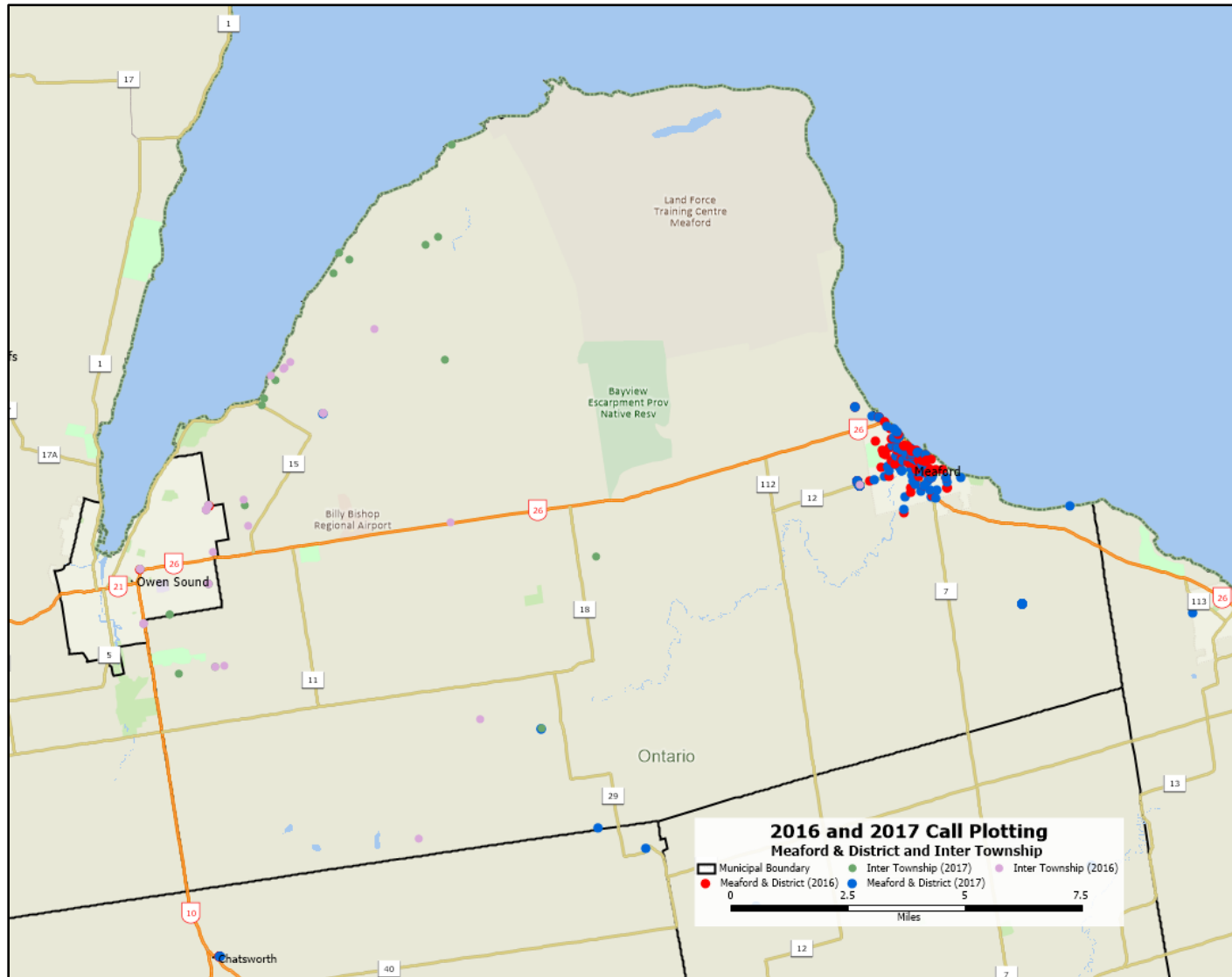
NFPA 1720 Standard

Demand Zone	Demographics	Minimum # of firefighters responding	Response time (turnout + travel) in minutes	Performance Objective
Urban	>1000 people per square mile >386 people per square kilometre	15	9	90%
Suburban	500-1000 people per square mile 193-386 people per square kilometre	10	10	80%
Rural	<500 people per square mile <193 people per square kilometre	6	14	80%
Remote	Travel distance + or – 8 miles (12.9 km)	4	Dependent upon travel distance	90%
Special risks	To be determined by Fire Department	To be determined by Fire Department	To be determined by Fire Department	90%

Illustrated in FIGURE 2.2 are the location of incidents as they occurred in 2016 and 2017. Most calls fall within the built-up area of the town. A secondary concentration of calls is in the Bayshore Road and Lakeshore Drive areas (Leith, Annan, and Balaclava).

Note: approximately 3% of the call locations were not identified by the mapping software. Calls in close proximity or at the same address will show as a single dot.

Figure 2.2: Call Locations 2016/2017



Based on fire growth as demonstrated in *FIGURE 2.1: Fire Response Propagation Curve* and the previously noted associate timelines, the overall goal of any fire department is to arrive at the scene of the fire and/or incident as quickly and as effectively as possible. If a fire truck arrives on scene in eight minutes or less, with a recommended crew of four or more firefighters, then there is increased opportunity to contain the fire by reducing further spread to the rest of the structure.

However, if the first arriving fire attack team arrives with only three firefighters on board or the firefighters arrive before the firefighting apparatus, it is limited to what operations it can successfully attempt. (Note: The standard requires the arrival of a fire suppression apparatus to begin firefighting, therefore the response time must only be calculated on the arrival of a fire truck capable of undertaking suppression). Based on studies and evaluations conducted by the National Institute of Standards and Technology (NIST), the NFPA, and Ontario Firefighter Health and Safety Section 21 Guidelines, no interior attack should be made by the firefighters until more staff arrive on scene. While recognizing the constraints of a volunteer fire department, the initial expectation is that a minimum of three firefighters and one officer arrive on scene with a fire truck to make up the initial response team. This team of four can effectively do an assessment of the scene, secure a water source (fire hydrant if available), ensure the fire truck is ready to receive the water, get the fire pump in gear, and finally unload and advance the fire hose in preparation for entry into the structure. A team of four also allows for adherence to the recommended “two-in, two-out” rule, meaning that when two firefighters go into the structure, there are two outside ready to go in as back-up.

Further, additional resources should be enroute quickly if there is going to be opportunity to make an offensive attack. The NFPA Implementation Guide states that a fire department must be capable of establishing the following functions at each structural fire: Incident Command, water supply, attack lines, backup lines, search and rescue teams, ventilation teams, and rapid intervention crews. This normally requires a minimum of 10-12 firefighters for a standard residential structure fire to meet all these roles. Therefore, it is vital to have adequate firefighters to respond to a structure fire.

This information is a valid reason for the fire chiefs to ensure that each station has a complement of firefighters that allows for an initial full crew response to such incidents. To accomplish this need for personnel, a response protocol is in effect that ensures that whenever a department is dispatched to any type of call where back-up may be required, another station is dispatched to the same incident immediately. This occurs automatically for any structure fire and on direction of an officer to other types of incidents. It is recommended that further review of incident types and locations be conducted by the fire chiefs to ensure the dual response protocol is being followed and to determine other automatic dual station responses.

The Municipality, being served by two fire departments, should establish the dispatch protocols (e.g. closest station for response boundaries and stipulate automatic dual station calls for structure fires, etc.) for the Municipality and closely monitor for compliance, and even

be enhanced if the reviews identify any concerns.

In this Section, responses and times are discussed as they relate to NFPA 1720. If the addition of these response times is a measured level of service that Council wishes to incorporate, they must then be noted in the Establishing and Regulating By-law. Regardless of whether Council establishes a response time standard, the fire departments should be tracking and reporting on their level of service, on a year-to-year basis. This is a good practice for the fire chiefs, as it allows for a proper assessment of response types, number or responses, and a thorough evaluation of response times to assess if the Fire Department can keep up with the demands of the community. The analysis enables all to see when challenges arise in response capability before these challenges become critical in nature.

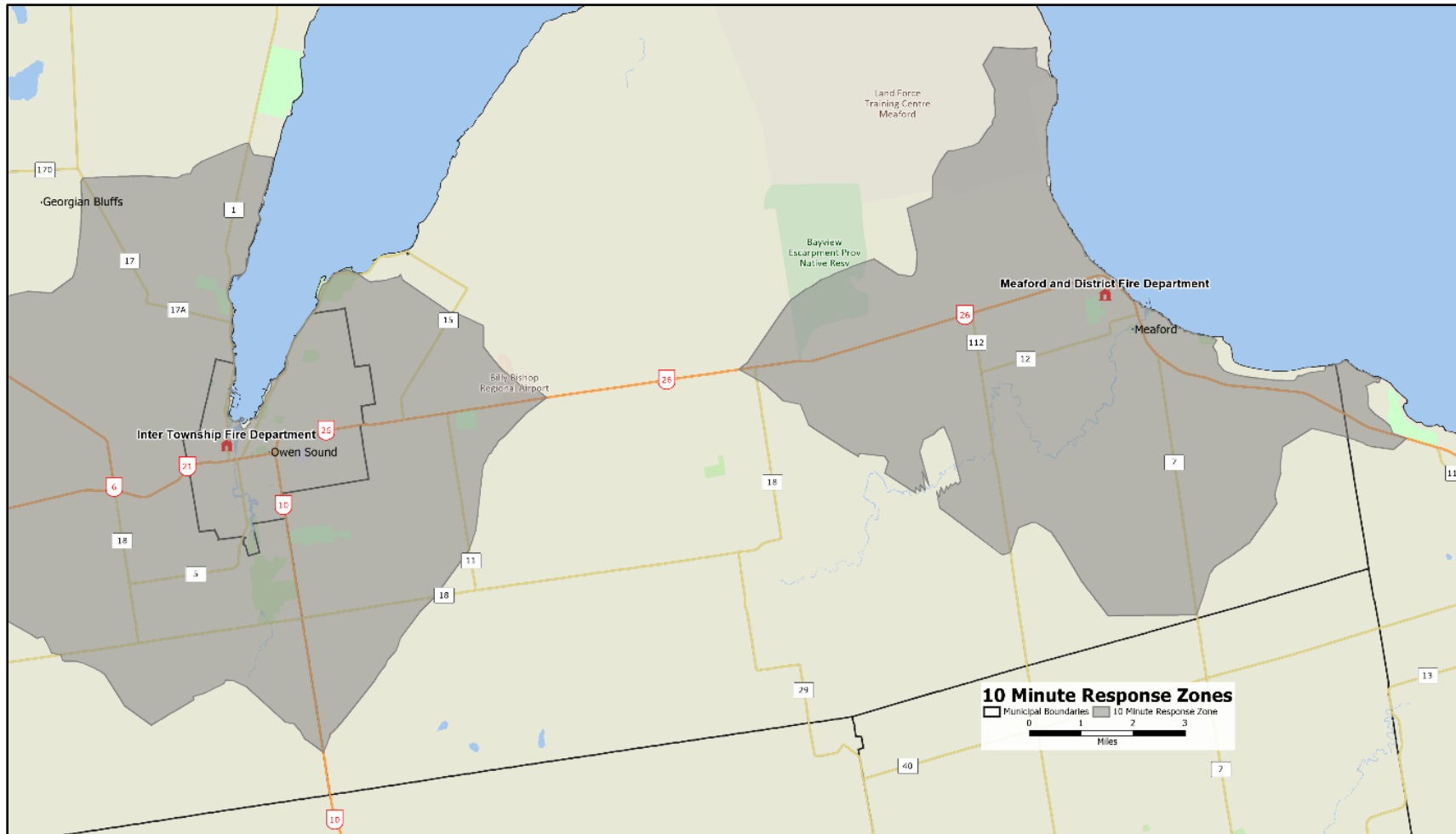
Note: Although the Municipality falls within the Rural response time standards under the NFPA 1720 definition, the downtown core of Meaford is much more densely populated than the rest of the Municipality and this area itself would fall under the Suburban population density. Therefore, the Chief should develop a Standards of Cover document that specifically targets this core area with the NFPA 1720 Suburban standard of 10 firefighters within 10 minutes 80% of the time.

Response Capabilities

Utilizing the NFPA Standard 1720 of six firefighters on scene within a 14-minute response time, the following map denotes the response capabilities of the current fire stations. Using a 4-minute goal to have the firefighters respond to the station and staff the first apparatus (assembly time), a 10-minute travel time is depicted for a total of 14 minutes (this considers time for actual dispatch and response to the fire station).

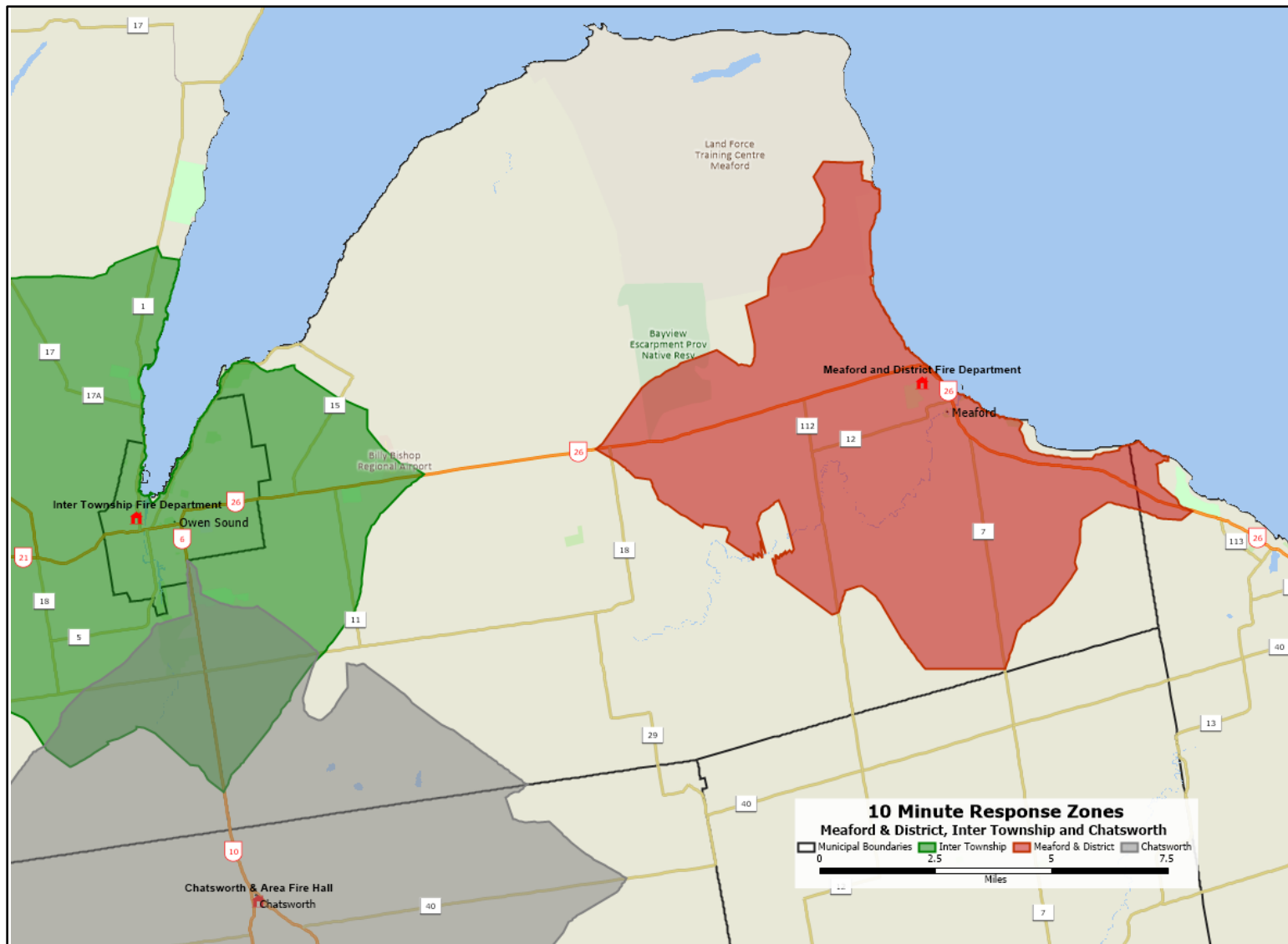
The current locations of the fire stations are historical in that they have been established based on previous township boundaries and agreements.

Figure 2.3: Response Capabilities of MDFD and ITFD Using NFPA 1720



The following map reflects the response capabilities to the 14-minute NFPA standard with the inclusion of the Chatsworth Station (4-minute assembly time, 10-minute travel time).

Figure 2.4: Response capabilities of MDFD, ITFD, and Chatsworth FD using NFPA 1720



The fire station in Chatsworth, being very close to the municipal boundary with Meaford, has the ability for a more rapid response to the south western area of the municipality than ITFD. A fire protection agreement would provide for a quicker fire department response to calls in south west where Chatsworth is closer than ITFD.

The following map combines the incident plotting (2016 and 2017) with the current response capabilities from the MDFD and ITFD. As can be seen in the following map (FIGURE 2.5), the predominant locations for calls within the eastern portion of the Municipality are within a 14-minute response time of the MDFD station. Most locations for calls within the western portion of the Municipality are outside the 14-minute response zone (4 minutes to respond to the stations and 10-minute travel time) of either MDFD or ITFD.

Figure 2.5: Call Locations 2016/2017

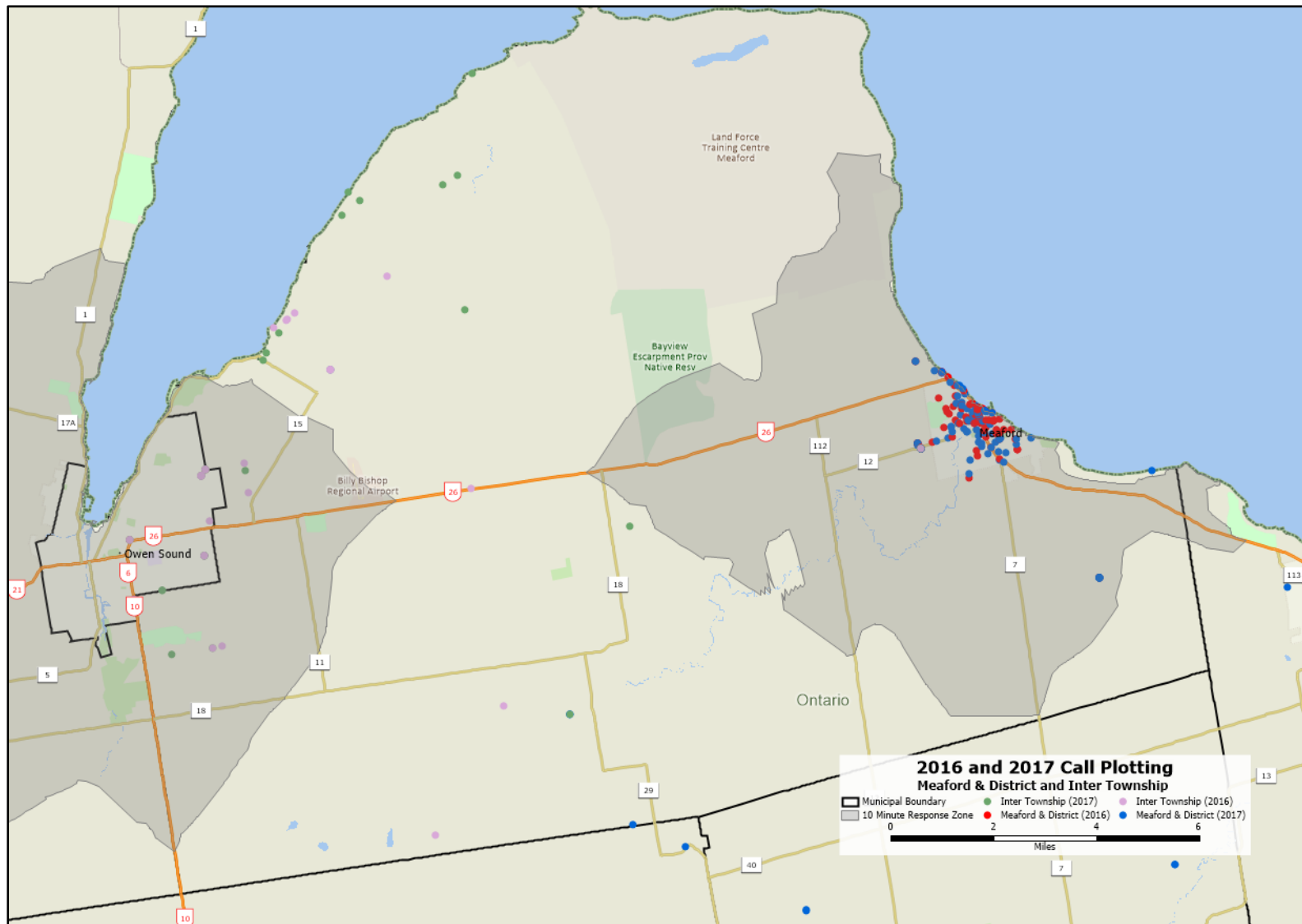


Figure 2.5 identifies response capability gaps in the central portion of the Municipality.

Fire Protection Services should be positioned to offer the most efficient and effective response to the community they serve. Fire station location depends on many factors such as key risks within the response zone, future growth of the community and even the location and availability of on-call firefighters. Another consideration is the geographical layout of the community including natural barriers or divides such as rivers/ bridges that can cause response delays.

Public Fire Safety Guideline – PFSG 04-08-13 on Fire Station Location notes fire stations should be situated to achieve the most effective and safe emergency response. Distance and travel time may be a primary consideration; however, if a basic expectation of response time is set by the community’s decision makers, then a more realistic level of service and fire station location criteria can be identified.

To look for opportunities to address this response coverage gap we looked at various areas in the western area of the Municipality to identify fire station locations that would provide the best coverage for the community. The four areas in the maps below include:

- Hwy 26 and County Road 11 area
- Village of Annan
- Village of Woodford
- Billy Bishop Airport area

The following maps reflect the ability of apparatus to respond using the same time criteria (4 minutes assembly time, 10 minutes travel time) from 4 different potential site locations.

Of the four locations identified, the Village of Woodford would not provide adequate response along the western shore.

Figure 2.6: Response coverage potential with a station at or near Hwy 26 and County Road 11

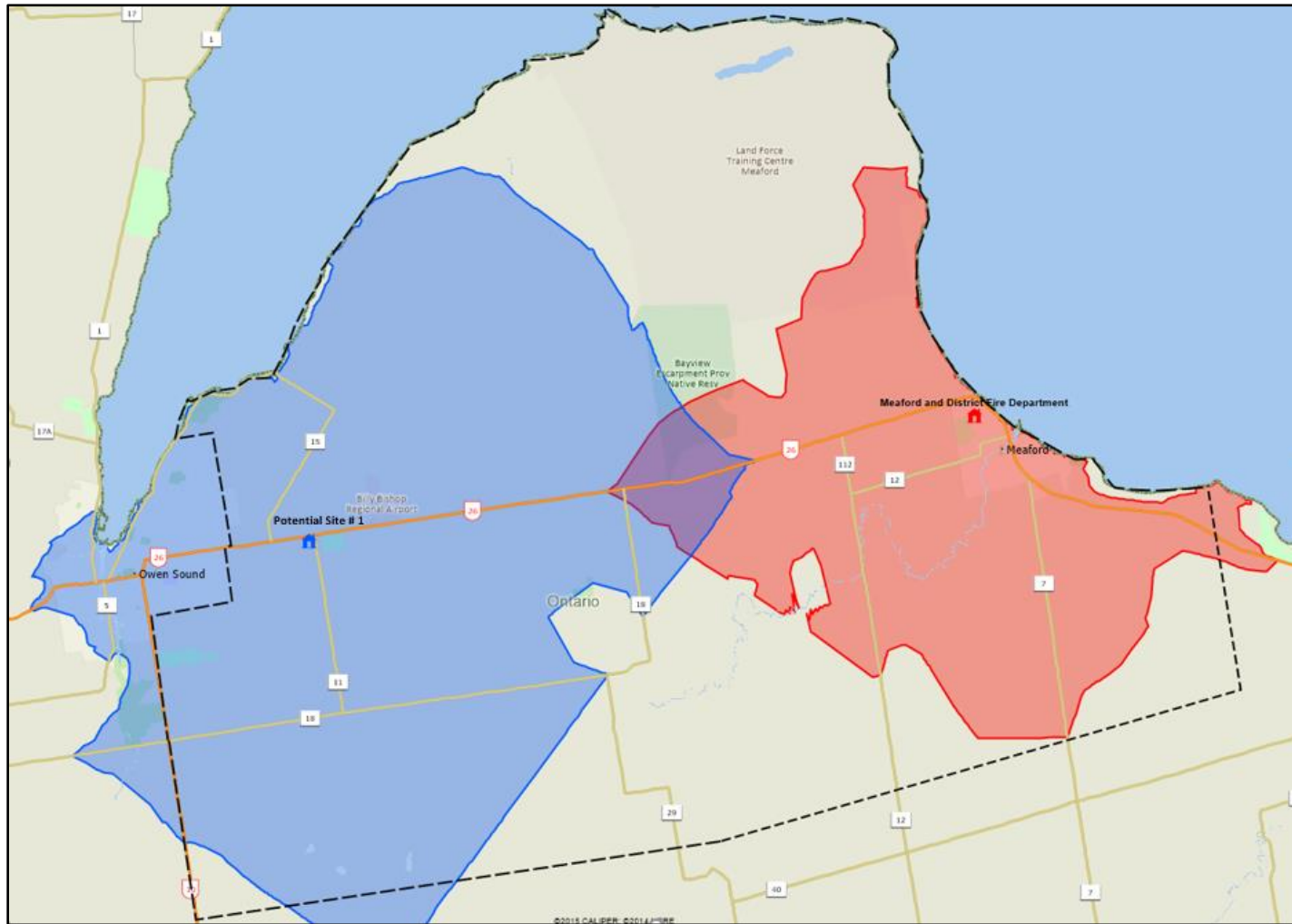


Figure 2.7: Response coverage potential with a station at or near Annan

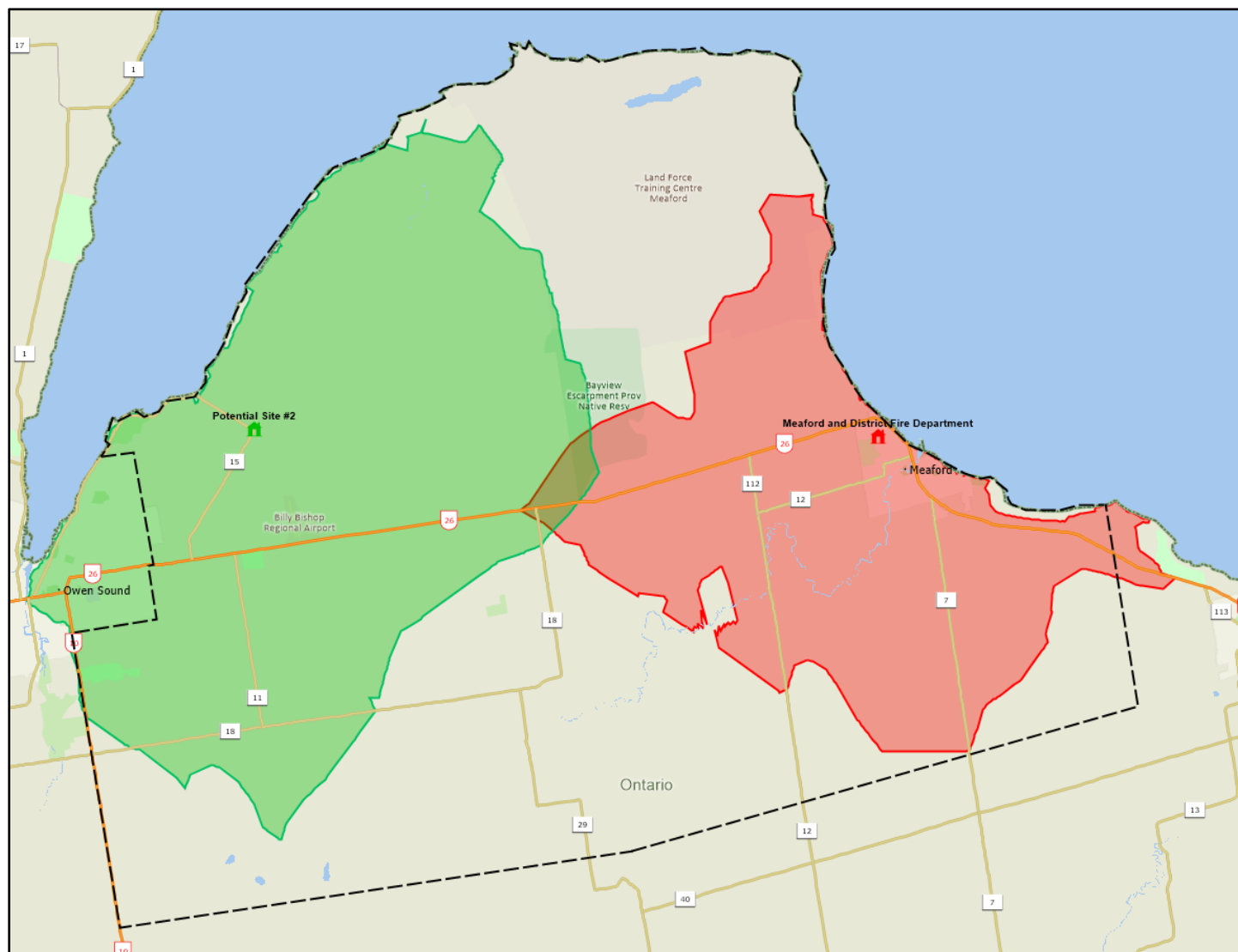


Figure 2.8: Response coverage potential with a station near the Community of Woodford

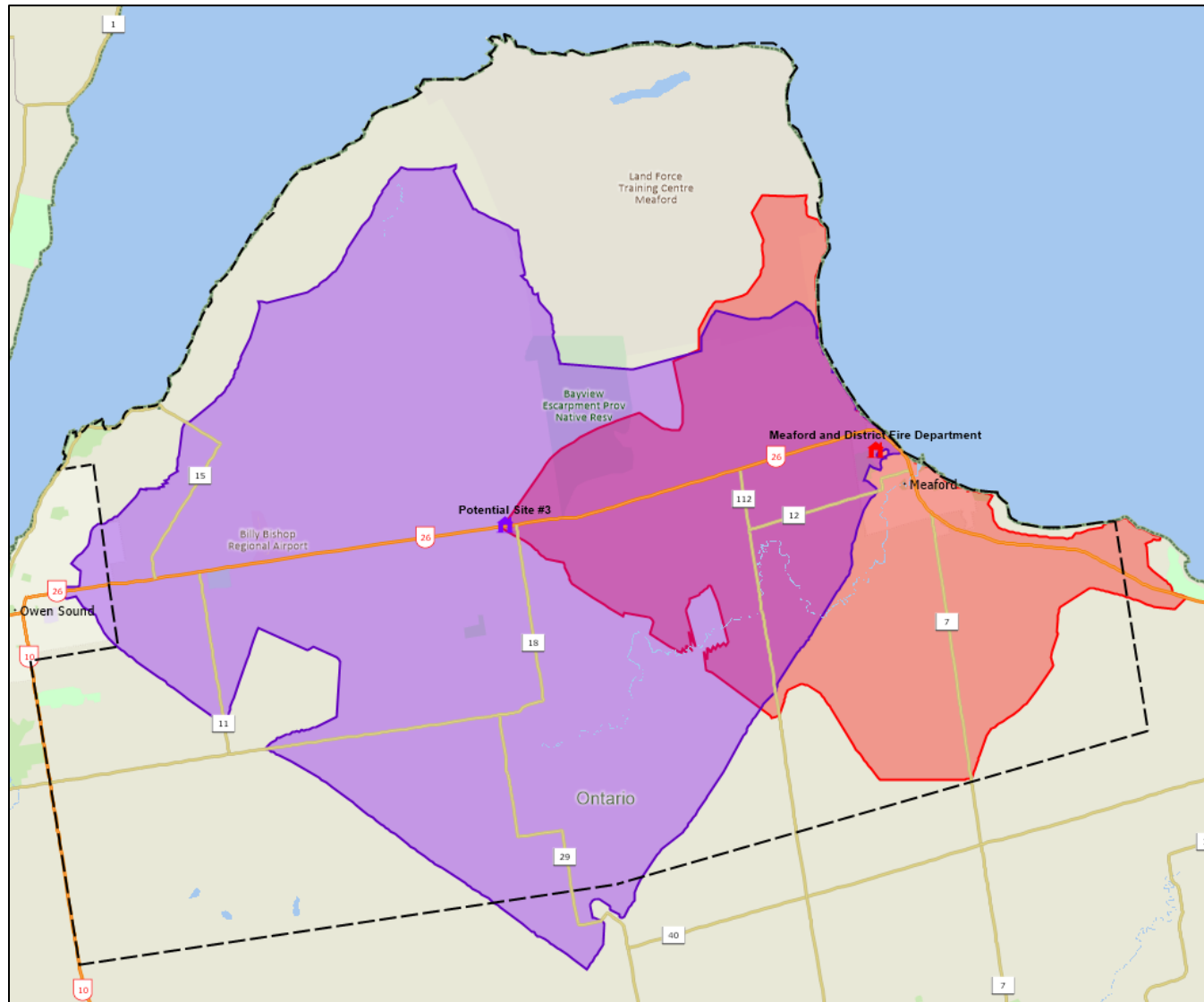
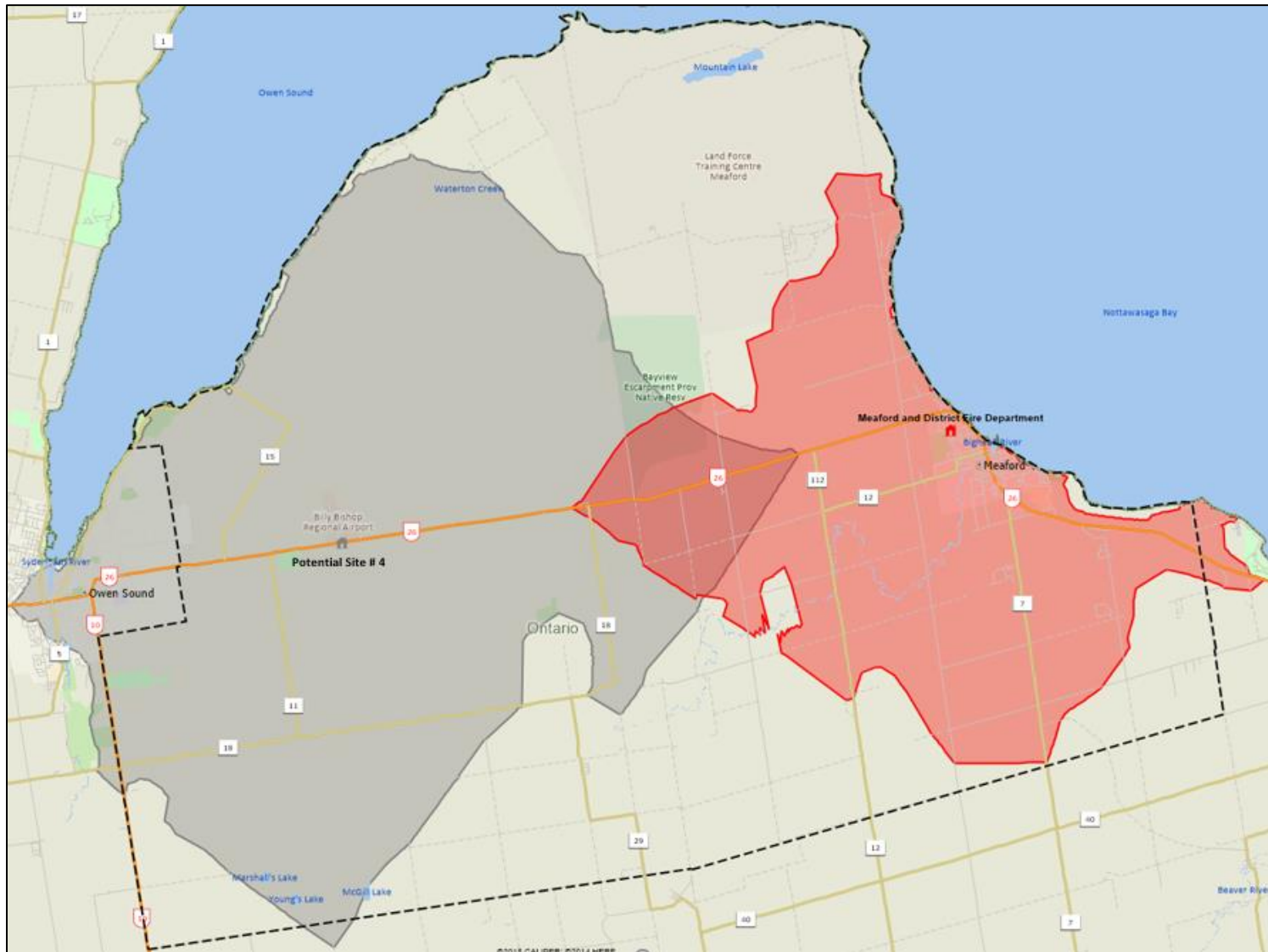


Figure 2.9: Response coverage potential with a station near Billy Bishop Regional Airport



It is clear that response times could be improved significantly for the residents of the western portion of the Municipality by placing a fire station in the western area of the Municipality. Response mapping indicates a preferred location along Hwy 26 between Concession 11 and the Billy Bishop airport or north towards Annan.

Having the fire apparatus respond in a more rapid manner improves the opportunities for the firefighters to provide rescue and suppression in a fire situation, reduces the time to start medical intervention (oxygen/defibrillation), and allows for extrication to start sooner for those trapped in motor vehicles/equipment. Having a fire station in closer proximity to residences may also provide for lower insurance rates and improved confidence in the fire services. Having a station at these locations also eliminates the need to have firefighters respond to scenes in their personal vehicles, a high-risk practice.

If the Municipality was to open a station in the west, there would be opportunity for the current ITFD volunteers living within the Municipality to become members of the MDFD for the west station.

An early step in opening a station in the western area of the Municipality would be to recruit the ITFD firefighters who already live within the Municipality and others living in the western area of the community to staff the station.

The capital and operational costs of a western station would be offset by the current annual costs paid to the ITFD which would revert to the Municipality. Further, cost recovery from the provincial recovery costs to emergency responses on provincial highways, along with the insurance recovery would be redirected to the Municipality. There would also be funds owing from ITFD from the appraisal of the jointly owned assets (25% owned by the Municipality of Meaford).

In addition to any construction or renovation costs, a west station should be equipped with a Pumper/Tanker at a cost of \$650,000 and a light rescue truck at \$150,000. These costs may be offset by transferring apparatus from ITFD. We have estimated that \$250,000 should be budgeted for start-up costs including bunker gear (\$38,000), SCBA (\$70,000), radio equipment including portables (\$45,000), recruitment and training (\$75,000) and miscellaneous start-up costs.

We have estimated that the annual operating costs would be approximately \$88,500 based on 15 firefighters. We used 42% of the current operational costs (excluding the costs of the Fire Chief and Fire Prevention Officer and HQ costs that would not be impacted) which was calculated by taking current operational costs.

Primary steps and considerations to establish a new fire station:

- Separation agreement if MDFD selected to operate the new station

- Recruitment of firefighters (ITFD firefighters living in the area along with recruiting new firefighters from the community)
- Training program
- Apparatus (pumper/tanker)
- Equipment (firefighter and apparatus)
- Temporary adjustments / renovations to West Works Yard
- Design/ build new station

It should be noted that in 2011, a previous Master Fire Plan was completed by a highly reputable consultant that demonstrated how a new station in the western portion of the Municipality would improve fire department response times and help reduce insurance rates. Our analysis has come to the same conclusion.

A question has been raised as to the potential of contracting out the fire suppression services for the western portion of the Municipality if Meaford withdrew from the current ITFD partnership. Currently the Municipality is paying the ITFD 25% of its overhead costs plus a contracted rate based on MTO fees for fire protection. It would seem unlikely that if the Municipality withdrew from this arrangement, ITFD would agree to continue coverage for the current contracted rates. Further, this does not address the extended response issues.

The Municipality may wish to investigate a fire protection agreement with the City of Owen Sound on a fee-for-service basis. Being a career fire department with firefighters on duty and a station closer to the Municipality would reduce the current response times. As the City runs a very limited fire service coverage with only one fire truck staffed, the City may be hesitant to utilize that truck for calls outside of the city proper.

2.5 Fire Protection Agreements

A Mutual Aid Plan is designed to be a tool that outlines the available help within a given area and the process to activate that help should a municipality find themselves taxed with an incident, or series of incidents. A plan of this nature is meant to be reciprocal. There are no fees attached to a Mutual Aid Plan. Mutual Aid Plans should not be used for daily coverage of a given area(s) where adequate fire protection within the municipal borders is limited.

To accomplish adequate fire protection in areas where a municipality is challenged to provide service, types of agreements other than that of the Mutual Aid Agreement, will be used. There are two types of agreements that are commonly used in Ontario. The *FPPA* allows for Automatic Aid Agreements. The *Act* states in 2(6), “A municipality may enter into an automatic aid agreement to provide or receive the initial or supplemental response to fires, rescues and emergencies.” The key to these agreements is that there are initial or supplemental responses. The second type of agreement commonly used is a Fire Protection Agreement. The *FPPA*, in Section 5(a-b) states, “A municipality may, under such conditions as may be specified in the agreement, enter into an agreement to,

- (a) provide such fire protection services as may be specified in the agreement to lands or premises that are situated outside the territorial limits of the municipality; and
- (b) receive such fire protection services as may be specified in the agreement from a fire department situated outside the territorial limits of the municipality.”

A review of the existing aid agreements was conducted, and details follow below. It is recommended that any updates or renewals to aid agreements be vetted by the OFMEM Specialist in addition to the Municipal Solicitor.

Township of Georgian Bluffs - "Inter-Township Fire Department" Jointly Managed and Operated Fire Department

The current agreement is cumbersome and will become more so as legislated changes come into effect. The Municipality is currently renegotiating the contract between the Corporation of the Township of Georgian Bluffs and the Corporation of the Municipality of Meaford. Emergency Management & Training Inc., upon request, provided two documents to assist with the negotiations including Contract Support Information Report and Performance Management Benchmarking. These documents are included in the Appendix of this report.

The current agreement is under review by the Municipality and ought to be weighed against the option of MDFD establishing a station within the western portion of the municipality.

If the Municipality of Meaford decides to continue in the partnership to operate the Inter-Township Fire Department (ITFD), it is recommended that the ITFD establishes a station within the Municipality to improve response times and that the contract establishes a mechanism for the Municipality to monitor the operations and performance of the fire services provided within the community. Further, a set of performance measures should be benchmarked and monitored to ensure that the Municipality is receiving the services to the standards it establishes and is paying for.

If the Municipality of Meaford decides to continue in the partnership to operate the Inter-Township Fire Department (ITFD), it is further recommended that the Municipality, along with the Township of Georgian Bluffs, have an independent firm conduct a thorough review and Master Planning Process for the Inter-Township Fire Department.

It is recommended that any updates or renewals to this agreement be vetted by the OFMEM Specialist in addition to the Municipal Solicitor.

Fire Dispatch Agreement

This agreement with the Owen Sound Police Service Board outlines the requirements for fire dispatching for the Meaford & District Fire Department. This agreement matured on December

31, 2017. The Municipality may wish to consider issuing a request for proposal for fire dispatch services as there are a number of fire departments that operate dispatch operations serving multiple municipalities including Barrie, Orillia, and Guelph.

Sentence 1 referenced that the calls will be promptly acknowledged and dispatched. This should reference the standard NFPA 1221: *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*. Section 7.4 outlines the requirements for time and is simplified in the appendix with a chart as shown below.

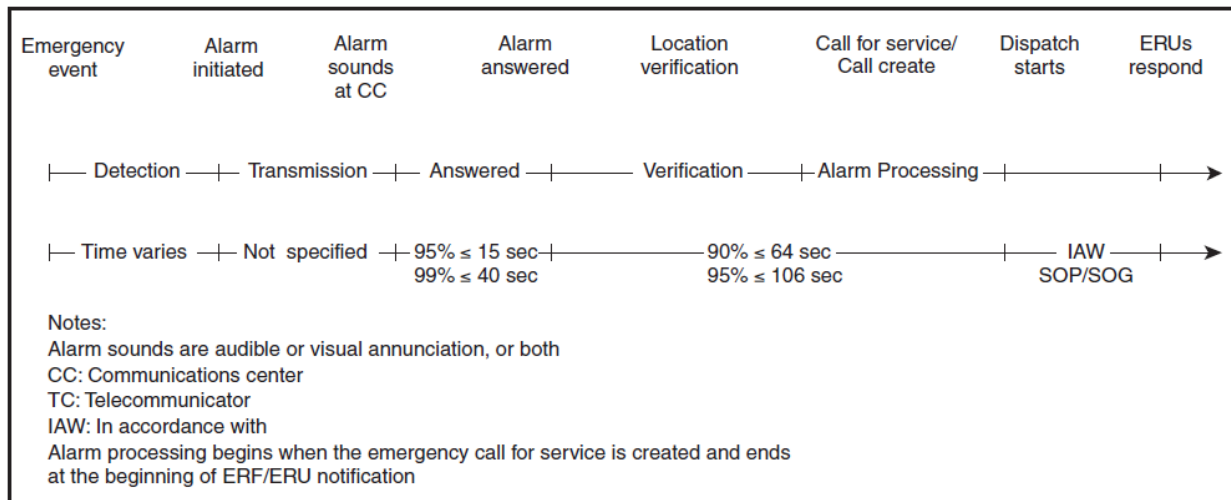


FIGURE A.7.4.1(a) Alarm Time Line Where Primary PSAP Is Communications Center.

Sentence 18 of the agreement references the training of the dispatching staff. The standard to which the dispatchers should be certified to should be updated according to NFPA 1061; *Professional Qualifications for Public Safety Telecommunications Personnel*, 2014 Edition, Level I.

Schedule A references the PFSG 04-64A-12 for the times that the dispatch service will provide logging for. The addition of the new regulation O. Reg. 377/18, PUBLIC REPORTS, with a compliance date of January 1, 2020, requires certain times that are logged and reported publicly to council. For the volunteer fire service, the table referenced in the legislation is:

TABLE

Item	Column 1 Time interval
1.	Alarm transfer time: The time interval from the receipt of the emergency alarm at the Public Safety Answering Point (PSAP) until the alarm is first received at the fire department communication centre
2.	Alarm answering time: The time interval that begins when the alarm is received at the fire department communication centre and ends when the alarm is acknowledged at the communication centre
3.	Alarm processing time: The time interval from when the alarm is acknowledged at the fire department communication centre until response information begins to be transmitted via voice or electronic means to fire department facilities and fire department units
4.	Alarm handling time: The time interval from the receipt of the alarm at the PSAP until the beginning of the transmittal of the response information via voice or electronic means to fire department facilities or the fire department units in the field
5.	Turnout time: The time interval that begins when the fire department facilities and fire department units notification process begins by either an audible alarm or visual annunciation or both and ends at the beginning point of travel time
6.	Travel time: The time interval that begins when a fire department unit is en route to the incident and ends when the fire department unit arrives at the scene
7.	Initiating action/intervention time: The time interval from when a fire department unit arrives on the scene to the initiation of emergency mitigation
8.	Total response time: The time interval from the receipt of the alarm at the PSAP to when the first fire department unit is initiating action or intervening to control the incident

(2) The public report does not have to set out information for items 1, 2, 3, 4 and 8 if the information is not available from the fire department's records.

Definition: PSAP: Public Safety Answering Point – the location where 9-1-1 calls are initially answered.

The fire dispatch agreement is devoid of any standards for call taking, dispatching, or record keeping. It is recommended that the dispatch agreement be amended to include appropriate standards such as call taking and dispatching times under NFPA - 1221 – Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, and

training requirements of the dispatcher to meet NFPA 1061 - Professional Qualifications for Public Safety Telecommunications Personnel. The NFPA 1221, Section 7.4 Operating Procedures denotes the following:

7.4.1 Ninety-five percent of alarms received on emergency lines shall be answered within 15 seconds, and 99 percent of alarms shall be answered within 40 seconds. *(For documentation requirements, see 12.5.2.)*

7.4.1.1 Compliance with 7.4.1 shall be evaluated monthly using data from the previous month.

The previous *FIGURE 2.1: Fire Response Propagation Curve* (page 34) outlines the need for early notification and dispatch. Delayed dispatching, especially in a volunteer department, translates into additional property damage or extent of injury. It is important that the time standards from within NFPA 1221 be met. To ensure the standards are being adhered to and that proper reporting is accomplished, both fire departments require incident details at the conclusion of each event. This data should then be uploaded into a fire service data management system so that reports can be generated. It is recommended that the Dispatch Agreement contain provision for the service provider to supply incident reports that outline the required data as noted in the OFMEM reporting requirements at the conclusion of each event.

Further, the dispatch protocols (e.g. closest station for response boundaries and stipulate automatic dual station calls for structure fires, etc.) for the Municipality should be reviewed and closely monitored for compliance.

As with all agreements noted above, and elsewhere, it is essential that they be vetted by the OFMEM Specialist and the Municipal Solicitor.

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
3	It is recommended that a review be undertaken of incident response procedures (automatic dual station responses), response boundaries (closest station), and response activities to improve response performance and target the response time objectives as outlined in National Fire Protection Association (NFPA) 1720.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review, where applicable

4	It is recommended that a fire protection agreement be entered with the Chatsworth Fire Department, similar in design and cost recovery to the Grey Highlands Agreement, to provide initial response to a realigned boundary for the southwest area of the Municipality where Chatsworth is closer than ITFD.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review, where applicable
5	It is recommended that the Municipality establish a Fire Station in the western portion of the Municipality. A pumper / tanker and a light rescue truck should be placed at the new station.	A new station may range from \$800,000 - \$1,600,000 dependant on the type of construction	Start the process short-term (1 – 3 years) for operations mid-term (4 – 6 years)
		\$250,000 be budgeted for training and initial capital equipment	Mid-term (4 – 6 years)
		A pumper/tanker is estimated at \$650,000, and a light rescue estimated at \$150,000. The cost should be offset by either moving an ITFD truck over or the funds that would be owed to the Municipality by ITFD.	
6	The Municipality, along with the Township of Georgian Bluffs, should have an independent firm conduct a thorough review and Master Planning Process for the Inter-Township Fire Department.	\$45 - 50,000 shared between the two municipalities	Short-term (1 – 3 years)

7	The dispatch protocols (e.g. closest station for response boundaries and stipulate automatic dual station calls for structure fires, etc.) for the Municipality should be reviewed and closely monitored for compliance.	No identified costs other than staff time	Short-term (1 – 3 years)
8	Any updates or renewals to aid agreements should be vetted by the Ontario Fire Marshal's Office and Emergency Management Specialist and the Municipal Solicitor.	Staff time plus costs of legal review	
9	It is recommended that the incident reporting be outlined in a policy for both fire departments so that the reporting meets the intent of the Ontario Fire Marshal's Office and Emergency Management directions.	No identified costs other than staff time	Short-term (1 – 3 years)
10	It is recommended that the dispatch agreement be amended to include appropriate standards such as call taking and dispatching times under NFPA - 1221 – Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, and training requirements of the dispatcher to meet NFPA 1061 - Professional Qualifications for Public Safety Telecommunications Personnel.		
11	It is recommended that the Dispatch Agreement contain provision for the service provider to supply incident reports that outline the required data as noted in the Ontario Fire Marshal's Office and Emergency Management reporting requirements at the conclusion of each event.		

SECTION 3: Fire Prevention

- 3.1 Simplified Risk Assessment
- 3.2 Fire Inspection Program
- 3.3 Fire Investigations
- 3.4 Fire Code Enforcement
- 3.5 Public Education Program
- 3.6 Determination of Fire
Prevention/Inspection Staffing
Requirements
- 3.7 Additional Public Educational
Considerations

Section 3: Fire Prevention

The first and most effective ways to reduce injuries, death, and property damage due to fire are public education, inspections, and enforcement. The Fire Prevention program addresses these key components of fire safety.

The OFMEM identified that the municipal fire prevention program and tasks associated with fire prevention, such as public education and simplified risk assessment, are key areas not meeting their expectations. The OFMEM expectations are applicable across the Municipality and it is incumbent on the Municipality to ensure the responsibility is being carried out appropriately throughout.

For fire prevention initiatives to be effective, an organization needs to accomplish three distinct tasks:

1. Complete a needs analysis to identify the significant fire risks to the community,
2. the selection, development and implementation of appropriate programs to address the identified risks, and
3. an evaluation of the effectiveness of the fire prevention programs.

To assist with a review of this section, reference will be made to the *Fire Protection and Prevention Act* and the NFPA 1730 - *Standard on Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations*.

Needs Analysis:

A Needs Analysis for fire prevention programming involves assessing the relative fire risks in a community and identifying the significant risks which should be addressed. It also involves compiling adequate information to conduct the analysis and for appropriate program selection, development and implementation.

Information including fire losses, implications of fire occurrences (i.e. primary employer out of business), the building stock, and demographics of the community must be gathered and assessed by the Department to identify areas of high risk and prioritization for Fire Prevention.

Program Selection:

There are minimum fire prevention programs required for a community under the *Fire Protection and Prevention Act*. The minimum acceptable level that a municipality must provide includes the following:

- Simplified Risk Assessment

- Smoke Alarm Program
- Fire Safety Education materials distributed to residents /occupants
- Inspections upon complaint or Request to Assist with code compliance (including any necessary code enforcement)

Additional programs may also be required based upon the risks identified by the Needs Analysis, with consideration for available resources.

Program Evaluation:

Evaluation of the effectiveness of fire prevention programs is essential to ensure the most appropriate use of the community's resources and to also identify the needs for more staffing as a community grows in population. Regular evaluation is an ongoing function for the fire service managers and should incorporate a consistent application of the model's process of Needs Analysis, Program Selection, and Program Evaluation.

To accomplish these three components, an organization needs to conduct a Simplified Risk Assessment to recognize the risks and identify programs required to address them.

3.1 Simplified Risk Assessment

As noted in the Ontario Fire Marshal's Public Fire Safety Guideline, PFSG 04-40A-03, the Simplified Risk Assessment (SRA) and ensuing fire concern profile will assist in identifying the degree to which these activities are required in accordance with local needs and circumstances. The Simplified Risk Assessment is made up of the following components:

- demographic profile
- building stock profile
- local and provincial fire loss profiles
- information analysis and evaluation
- priority setting for compliance
- implementing solutions

Conducting a Simplified Risk Assessment is a practical information gathering and analyzing exercise intended to create a community fire profile which will aid in identifying appropriate programs or activities that can be implemented to effectively address the community's fire safety needs.

The SRA is an integral building block in the data gathering process to understand the community that is served by the Fire Department. As the community continues to change, the document should not become dormant, as the results are only accurate to the time of which the review was conducted.

NFPA 1730 – Standard on *Organization and Deployment of Fire Prevention Inspection and Code Enforcement, Plan Review, Investigation, and Public Education Operations*, notes that this review should be conducted at a minimum every five (5) years or after significant change. This standard also establishes a process to identify and analyze community fire risks. This standard refers to the process as a Community Risk Assessment (CRA). There are seven (7) components of a CRA outlined in NFPA 1730. These components are:

1. Demographics
2. Geographic overview
3. Building stock
4. Fire experience
5. Responses
6. Hazards
7. Economic profile

Current Condition

Both the Meaford and District Fire Department and Inter-Township Fire Department have an SRA dated from 2017, however, they lack comprehensive information on their respective areas.

The SRA for the Inter-Township Fire Department is for their entire coverage area, not municipality-specific. This creates challenges for the Municipality of Meaford Council in understanding what the specific risks are in the western portion of the community and ensuring that the fire services are designed and capable of meeting those needs.

Changes that can impact the demographic profile and, consequently, the needs and circumstances for the delivery of services by the Fire Department need to be measured on a regular basis. It should be noted that any changes to an SRA will relate to increases in numbers, or frequency, and possibly the services that are required to be delivered. One caveat to the changes in services offered relates to Vulnerable Occupancies. With the introduction of the legislation around Vulnerable Occupancies, the Fire Department has legislative requirements that must be maintained. With the new requirements under the legislation, additional training and time is necessary for Fire Prevention staff to adequately ensure compliance. This is time that cannot be spent in conducting other fire prevention inspections and/or public education. It is recommended that current Vulnerable Occupancies be clearly identified and the legislative requirements for the Fire Department and the occupancies be met.

Future Needs

Understanding the community and its needs allows the Fire Administration to be proactive in education and enforcement programs to the community and to all Fire Department staff. When fires occur within the community, the firefighters can be ready to battle the fires because they are trained, not only in the basics of firefighting, but in the unique hazards that are found within the community. These hazards are noted in the SRA so that Fire Administration can

ensure programs are in place to deal with them.

As a community grows, the frequency of and the need for service will grow. It is recommended that a single SRA be developed for the Municipality. It is noted in the standards that these reviews be conducted every five (5) years, however, it is recommended that the SRA review be conducted every four (4) years, along with the Establishing By-law. The presentation of both documents to the newly sitting council at the beginning of the council term will allow the council members to understand the scope of the Fire Department and the financial needs to sustain it.

The FPPA Ontario Regulation 378/18 phases out the SRA and will require communities to develop a Community Risk Assessment (CRA) by July 1, 2024, reviewing and updating this assessment annually.

3.2 Fire Inspection Program

The Meaford and District Fire Department has hired, on a short-term contract basis, a firefighter who is certified as a Fire Inspector 1 and Fire and Life Safety Educator 1 to fill the role of Fire Prevention and Inspections. This position is not guaranteed past the current year.

The Inter-Township Fire Department contracts the services of an individual for Fire Inspection purposes 16 hours per week for both the western portion of the Municipality of Meaford and the Township of Georgian Bluffs.

There is a challenge in that the Inter-Township Fire Department does not provide reports specific to the Municipality of Meaford but combines both municipalities into a single report. This means that Council is unable to determine how comprehensive or effective the Fire Prevention Program (fire prevention education, inspections, enforcement) is within the western portion of the Municipality.

Over the last number of years, changes have occurred in how Fire Code violations are reported. Previously, a Fire Inspection Report was produced and delivered to the 'owner' (as defined by the Ontario Fire Code) of the building being inspected. This report provided guidance for the 'owner' to fix the shortcomings noted to ensure compliance with the Fire Code. Following the changes, a Fire Inspection Order should be completed and delivered to the 'owner'. This Order is a proper legal document that has provision for the receiver to appeal to a higher authority. This appeal process was absent in the old method of conducting fire inspections.

Currently, Fire Inspection Orders are being issued by the Meaford and District Fire Department, while Fire Inspection Reports are being produced and delivered for Fire Code Violations by the Inter-Township Fire Department consistent with the previous reporting method. The OFMEM has produced and delivered programs that train on the use of Fire Inspection Orders. These seminars are still offered throughout the Province.

Further, as noted previously in this report, legislative changes to Vulnerable Occupancies have generated certain responsibilities that must be addressed by the Fire Department. The Fire Chief, or assigned inspector, is required to take additional training to deal with and sign-off on actions and activities conducted in, and for, Vulnerable Occupancies. In Section 6 – Firefighter Training – of this report, the changes to the NFPA Professional Qualifications Standards are discussed. NFPA 1031 – *Standard for Professional Qualifications for Fire Inspector and Plan Examiner* is the current training level required for a Fire Inspector along with a series of Ontario Fire Code and Court Procedure programs within the Province of Ontario. It is recommended that a Fire Inspector for the Municipality of Meaford be certified to the NFPA 1031 (Level 1 minimum) with the training specific to Ontario. Additionally, the Fire Inspector should receive the appropriate training to deal with Vulnerable Occupancies.

The Simplified Risk Assessment/Community Risk Assessment, discussed in Section 3.1 – Simplified Risk Assessment of this report, becomes an integral part of determining the fire inspection needs. The assessment enables a full look at what types and numbers of building stock are within the Municipality, enabling both the Fire Chief and Council to determine an appropriate Fire Prevention Policy. This policy would outline what kind of inspection program is necessary for the Municipality. There are various models from which a local policy could be built.

Some models have a Request or Complaint process, with the additional responsibilities required of Vulnerable Occupancies. Other areas have a program that sets a frequency of inspections based off building type and occupancy. Generally, smaller municipalities utilize the Request or Complaint with the vulnerable occupancy responsibilities as a benchmark for level of service. There must be at least this minimal level of service in order to be compliant with the Regulation O. Reg 365/13 *Mandatory Assessment of Complaints and Requests for Approval*. This Regulation finds its power from the FPPA. Within this Regulation is reference to Public Fire Safety Guideline (PFSG) 04-40D-03 *Inspections Upon Request or Complaint*, further guidance to the process of conducting inspections.

It is recommended that upon completion of an updated SRA/CRA, the Fire Chief should recommend to Council the most appropriate Fire Prevention and Inspection Policy. The passage of this policy by Council sets the level of service for the Fire Prevention Program within the Municipality.

Should the current model continue, it is recommended that a formal delegation of power be presented to the Fire Inspector, with a copy on file, in accordance with the FPPA 6(6) which states, “A fire chief may delegate his or her powers or duties under sections 14, 19 and 20 and such other powers and duties as may be prescribed to any firefighter or class of firefighters, subject to such limitations, restrictions or conditions as may be prescribed or set out in the delegation. 1997, c. 4, s. 6.”.

The Integrated Risk Management Tool

A more defined process can be utilized in conjunction with the SRA/CRA. The Ontario Fire Marshal's Communiqué 2014-12 introduced the Integrated Risk Management (IRM) Tool to the Fire Service. The document notes:

The IRM Web Tool was developed as part of a commitment made by the OFMEM to the Ontario Association of Fire Chiefs (OAFC) and other stakeholders. The IRM Web Tool can be used by all Ontario's municipalities and fire departments to determine building fire risks in their respective communities by considering building characteristics (building factors) and the three lines of defence against fire (Three Lines of Defence):

Line one: Public Fire safety education

Line two: Fire safety standards and enforcement

Line three: Emergency response

The Integrated Risk Management Web Tool is built around the Three Lines of Defence and intended for municipal and fire service decision-makers. The tool was designed to assist municipalities in fulfilling the responsibilities prescribed in Section 2 of the *Fire Protection and Prevention Act*, 1997 (FPPA).

The concept of the IRM is a "building-by-building" assessment with a goal to go beyond simply taking stock of buildings within the community; it is intended to be a holistic approach meant to combine all the Fire Department's efforts in relation to:

- Fire prevention and education initiatives, which includes updated community reviews using the OFMEM Simplified Risk Assessment
- Fire station locations and ability to respond in an efficient and effective manner
- Identification of hazardous situations/locations within the community
- Training and equipping of the firefighters to execute their duties in a safe and efficient manner

As such, the IRM approach is a combination of all facets of the fire service that is meant to combine a review of building stock, fire safety and prevention related issues to be addressed, ability to effectively and efficiently respond to emergencies, and how well equipped and trained the firefighters are to deal with emergencies within the community.

Currently neither fire department is utilizing the IRM tool.

It is recommended that all non-single-family residential building stock within the Municipality of Meaford be assessed with the IRM tool. It should be realized that conducting a review of every building within the Municipality of Meaford may take some time. As such, it is further recommended that this process be second after the Fire Prevention and Inspection Policy outlined in Section 3.2 – Fire Inspection Program. The Policy can then be updated upon completion of the community fire risk measurement from utilizing the IRM tool.

Utilizing NFPA 1730 definitions of risk categories may guide Council in deciding the focus and service level within the community. Council should decide (with input from the Fire Chief(s)) the acceptable risk level to manage in the community based on the needs of the community and balanced with the circumstances to deliver the services.

NFPA 1730 defines the risks in three categories and provides examples for each. These risk categories are:

High-Risk Occupancy – an occupancy that has a history or high frequency of fires, high potential for loss of life or economic loss, or that has a low or moderate history of fire or loss of life, but the occupants have a high dependency in the built-in fire protection features or staff to assist in evacuation during a fire or other emergency.

Examples: apartment buildings, hotels, dormitories, lodging and rooming, assembly, child care, detention, educational, and health care

Moderate-Risk Occupancy – an occupancy that has a history of moderate frequency of fires or a moderate potential for loss of life or economic loss

Examples: ambulatory health care, and industrial

Low-Risk – an occupancy that has a history of low frequency of fires and minimal potential for loss of life or economic loss

Examples: storage, mercantile, and business

Utilizing the IRM tool, in conjunction with the guidance from NFPA 1730, will provide a picture of the resources, time, and tools required to keep the fire risk in the community to a manageable level, as defined by Council. The current and future building stock puts pressure on the Fire Inspector to accomplish an adequate amount of inspections to ensure Fire Code compliance within the community. To determine the current staffing needs, NFPA 1730 outlines a five-step process within Appendix C of the standard. This is outlined in *Section 3.2.2.: Determination of Staffing Requirements*, below. This sample staffing exercise is not part of the requirements of the standard but forms a guide for informational purposes. It is important to restate that it is Council that sets the level of service within the municipality. This level of service must be based off local needs and circumstances. In conjunction with the recommendations from *Section 9: Human Resources*, this staffing measurement tool could be utilized to provide data for consideration.

Previously in this report, the SRA/CRA, Fire Inspection Policy, NFPA 1730, and the IRM tool were discussed. While it is recommended that a starting place for a Fire Prevention Policy would be a Request or Complaint process, with the additional responsibilities required of Vulnerable Occupancies. A more defined program should be implemented as data becomes available from use of the tools for measuring fire risk in the community.

It is recommended that the Fire Chief(s), armed with the data from the processes outlined, make changes to the Fire Prevention Policy for Council to consider. This data will lead to the understanding of the need for the inspection program to identify levels of desired frequency for inspections. A thorough risk assessment can also avoid invalid comparisons between your fire department and others. A municipality with a similar population may have very different fire risks, and therefore very different fire protection needs. A thorough risk assessment will ensure that such comparisons are valid. By providing a valid basis for comparison, a sufficient risk assessment can also provide confidence that innovations introduced elsewhere can be successfully applied in your municipality. It should also be noted that the Fire Underwriters Survey supports and recommends that a level of frequency be identified by the Fire Department in its quest towards ensuring a fire safe community.

TABLE 3.1 - FUS Suggested Inspection Frequency Chart:

Occupancy	FUS Benchmark
Assembly (A)	3 to 6 months
Institutional (B)	12 months
Single Family Dwellings (C)	12 months
Multi-Family Dwellings (C)	6 months
Hotel/Motel (C)	6 months
Mobile Homes & Trailers (C)	6 months
Seasonal/Rec. Dwellings (C)	6 months
Commercial (F)	12 months
Industrial (F)	3 to 6 months

The FUS Suggested Inspection Frequency Chart is highly aggressive, providing inspection frequencies that may be difficult to achieve. However, it provides an optimal set of goals for departments to strive towards. Priority should be given to Vulnerable Occupancies, institutional facilities, hotels/motels, multi-family dwellings (including basement apartments), and assemblies.

The Municipality has established its own inspection frequency chart in its Fire Service Standard Policy.

Occupancy Type	Frequency
Assembly Occupancies (A)	
Schools/Nurseries/Day-Care Facilities	Annually
Recreation Centres/Arenas/Performance Venues	Annually
Sports Clubs	Annually
Licensed Premises	Annually
Churches	On Request or Complaint
Special Occasion Permits	On Request or Complaint
Institutional (B)	
Hospitals	Annually
Nursing Homes	Annually
Homes for Special Care / Other Vulnerable Populations	Annually
Commercial, Business, Industry (D, E, F)	
Mercantile	On Request or Complaint
Business/Personal Service	On Request or Complaint
Factories or Industrial Complexes	On Request or Complaint
Residential (C)	
Multi-residential properties	Every three years
Hotels / Motels	Annually
Bunkhouses	Annually
Home Inspection Program	Voluntary

The utilization of the IRM tool will provide an understanding of a fire risk building-by-building that can be extrapolated to show the risk in given areas. Along with the SRA/CRA, this tool will aid in the building and providing for the fire prevention inspection and education programs. Upon updating the SRA/CRA, the IRM tool can be used to begin the process of measuring the community for fire risk.

3.3 Fire Investigations

It is the duty of Fire Marshal “to investigate the cause, origin and circumstances of any fire or of any explosion or condition that in the opinion of the Fire Marshal might have caused a fire, explosion, loss of life or damage to property” (FPPA, Part III, 9.2).

The Fire Marshal’s Directive 2015-002 reporting of fires and explosions requiring investigation, outlines the reporting requirements for certain types of incidents. These types are listed as:

- Fires resulting in either a fatality or serious injury requiring person(s) to be admitted as in-patient(s) to a hospital (it is the responsibility of the fire department to confirm the status of injured persons transported by ambulance prior to release of the fire scene);
- Explosions (where the explosion is the primary event);

- All fires in vulnerable occupancies (i.e. retirement homes, care and treatment occupancies, and care occupancies as defined in the Fire Code);
- Fires suspected of being incendiary and for which expert investigative assistance is required with determining cause, origin or circumstance;
- Large loss fires, \$500,000 and over or where the loss is significant to the community;
- Fires of unusual origin or circumstances and for which expert investigative assistance is required with determining cause;
- Fires resulting in unusual fire/smoke spread;
- Fires involving circumstances that may result in widespread public concern (e.g. environmental hazard);
- Fires in multi-unit residential occupancies where fire spread is beyond unit of origin or where suspected Fire Code violations have impacted on the circumstances of the event; and
- Fires involving clandestine drug operations or marijuana grow operations.

For those incidents that are not contained in this list, it is incumbent upon the local fire department to gather the information to report to the Fire Marshal. The *Act* further outlines a duty to report for assistants to the Fire Marshal (of which the Fire Chief is). The *Act* states, “The assistants to the Fire Marshal shall report to the Fire Marshal all fires and other matters related to fire protection services as may be specified by the Fire Marshal. A report ... shall be made in the form and manner and within the time period specified by the Fire Marshal” (FPPA, Part III, 11.2, 3).

To accomplish an appropriate investigation to determine fire cause and origin, training is required. NFPA 1033 - Standard for Professional Qualifications for Fire Investigator outlines the necessary knowledge and skills required to accomplish the investigation in a proper manner. This training is offered in numerous venues including the Ontario Fire College. It is recommended that the Fire Chiefs, Fire Prevention Officer, and selected Officers be trained and certified to the NFPA 1033 standard, or equivalent. One such equivalent training opportunity, or to augment existing training, is through the National Association of Fire Investigators (NAFI). This agency provides training to NFPA 921 - Guide for Fire and Explosion Investigations.

3.4 Fire Code Enforcement

In this report, *Section 3.2: Fire Inspection Program*, information was provided in the proper delivery of reports when a Fire Code violation is noted. Failure for the Inspector to follow through with an issued Fire Inspection Order will leave the Municipality in a liable position. If the ‘owner’ fails to comply with an Order, to which they have not appealed, there are steps that must be taken. These steps can include, but are not limited to, reissuing a Fire Inspection Order

with new dates or laying of information with the Court Office, or denoting failure to comply with an Order. This second point will begin the process of Court proceedings. Proper training on the required processes will enable your Fire Inspector to conduct operations in an appropriate way, thus limiting liability to the Municipality and furthering fire safety in the community. It is recommended that those conducting Fire Safety Inspections and issuing Fire Inspection Orders within the Municipality of Meaford receive the training necessary that is recognized by the OFMEM.

Note: ITFD is not using the Fire Inspection Orders format and should move to the new standard.

3.5 Public Education Program

Based on our review, it is evident that the fire departments for the Municipality of Meaford recognize the importance of public education and prevention. Both MDFD and ITFD are conducting programs in their respective coverage areas, however, the consistency between the departments is varied, with citizens receiving differing programs dependant on whether they live in the eastern or western portion of the Municipality.

The FPPA directs that Public Education occurs in that it states, “ 2. (1) Every municipality shall, (a) establish a program in the municipality which must include public education with respect to fire safety and certain components of fire prevention.” This sentence is further clarified in a series of PFSGs. These guidelines are 04-40B-03 – Smoke Alarm Program, 04-40B-12 – Smoke Alarm Program and Home Escape Planning, 04-40C-03 – Distribution of Public Fire Safety Education Materials, and 04-40C-12 – Distribution of Public Fire Safety Materials.

A review of the Home Smoke Alarm Program should be conducted across the entire Municipality to ensure consistency for all residents. The review should include an assessment of current emergency response statistics and emphasize the delivery of the Home Smoke Alarm Program as the “first line of defence”, particularly in areas of the community where there are extended emergency response times due to factors such as travel distances from the fire stations. In addition to the Smoke Alarm material, emphasis should also be placed on Carbon Monoxide Alarms and the dangers of Carbon Monoxide (CO).

As indicated in sections above, greater use of fire prevention/education programs and activities as the “first line of defence” is an effective strategy for the Municipality of Meaford to achieve the desired outcomes. Reducing fire risk through education, smoke alarm programs, and teaching citizens how to properly respond in an emergency (e.g. home fire safety plans) are particularly important in the rural areas where there is an extended fire department response time.

Fire prevention and public education are number one in relation to the Three Lines of Defence as noted by the Office of the Fire Marshal and Emergency Management. As such, fire prevention and public education should be a priority.

Demographics

Demographics can be easily obtained from Statistics Canada. The most current demographic profile available from Statistics Canada is from 2016. Looking at demographics will enable the Fire Department to target populations for providing educational material and activities based off need. One caveat to using census data is the transient population that visit the community and use Highway 26 on a regular basis. The language of the travelers is undoubtedly as diverse as the type and colour of vehicle being used. The 2016 Census produces the following data:

TABLE 3.5– Age Characteristics

Age Characteristics	Percentage of Population
0 to 14 years	12.9
15 to 64 years	59.2
65 years and over	27.9
85 years and over	3.1
Average age of the population	47.9
Median age of the population	53

TABLE 3.6 – Types of Residential Structures

Type of Residential Structure	Number of Structures
Single-detached house	3975
Apartment in a building that has five or more storeys	0
Other attached dwelling	845
Semi-detached house	60
Row house	260
Apartment or flat in a duplex	20
Apartment in a building that has fewer than five storeys	35
Other single-attached house	475
Movable dwelling	10

This is relevant to the Fire Department as it highlights the fact that, in comparison to the provincial averages, the Municipality has a significantly older population. The percentage of population over 65 is 27.9%, whereas the provincial percentage is 16.7%. The median age in the Municipality is 53 in comparison to 41 years old provincially.

With a significantly older demographic for the Municipality, it does provide an area of focus for Fire Department Public Education.

3.6 Determination of Fire Prevention/Inspection Staffing Requirements

To determine the current staffing needs, NFPA 1730 outlines a five-step process within Annex “C” of the standard. It is important to restate that it is Council that sets the level of service within the community. This level of service must be based off the local needs and circumstances.

Note: Annex C is not a part of the requirements of this NFPA document but is included for informational purposes only.

The five-step process involves a review of the following items:

Step 1 – Scope of Service, Duties, and Desired Outputs

Identify the services and duties that are performed within the scope of the organization. Outputs should be specific, measurable, reproducible, and time-limited. Among the elements can be the following:

- Administration
- Data collection, analysis
- Delivery
- Authority/responsibility
- Roles and responsibilities
- Local variables
- Budgetary considerations
- Impact of risk assessment

Step 2: Time Demand

Using the worksheets in Table C.2.2(a) through Table C.2.2(d), quantify the time necessary to develop, deliver, and evaluate the various services and duties identified in Step 1, taking into account the following:

- Local nuances
- Resources that affect personnel needs

Plan Review - Refer to Plan Review Services Table A.7.9.2 of the standard to determine Time Demand.

Step 3: Required Personnel Hours

Based on Step 2 and historical performance data, convert the demand for services to annual personnel hours required for each program [see Table C.2.3(a) through Table C.2.3(e)]. Add any necessary and identifiable time not already included in the total performance data, including

the following:

- Development/preparation
- Service
- Evaluation
- Commute
- Prioritization

Step 4: Personnel Availability and Adjustment Factor

Average personnel availability should be calculated, considering the following:

- Holiday
- Jury duty
- Military leave
- Annual leave/vacation
- Training
- Sick leave
- Fatigue/delays/other

Example: Average personnel availability is calculated for holiday, annual, and sick leave per personnel member (see Table C.2.4).

Step 5: Calculate Total Personnel Required

Division of the unassigned personnel hours by the adjustment factor will determine the amount of personnel (persons/year) required. Any fractional values can be rounded up or down to the next integer value. Rounding up provides potential reserve capacity; rounding down means potential overtime or assignment of additional services conducted by personnel (personnel can include personnel from other agencies within the entity, community, private companies, or volunteer organizations).

Correct calculations based on the following:

- Budgetary validation
- Rounding up/down
- Determining reserve capacity
- Impact of non-personnel resources (materials, equipment, vehicles) on personnel

More information on this staffing equation can be found within the NFPA 1730 standard. The Fire Chief should assess the previous five steps and evaluate the present level of activity and the future goals of the Program.

To assist in this process, the Fire Chief(s) should more closely track the actual time spent on

each of the fire inspector activities (ranging from site plan reviews, routine inspections, licensing, complaints, and requests, to name a few).

Further, reporting should include clearly identifying the number of public education events, including the numbers of adults and children reached. By identifying the time spent on each project and collating this into approximate times, the Fire Chief can use those hours spent as a baseline figure in applying future initiatives.

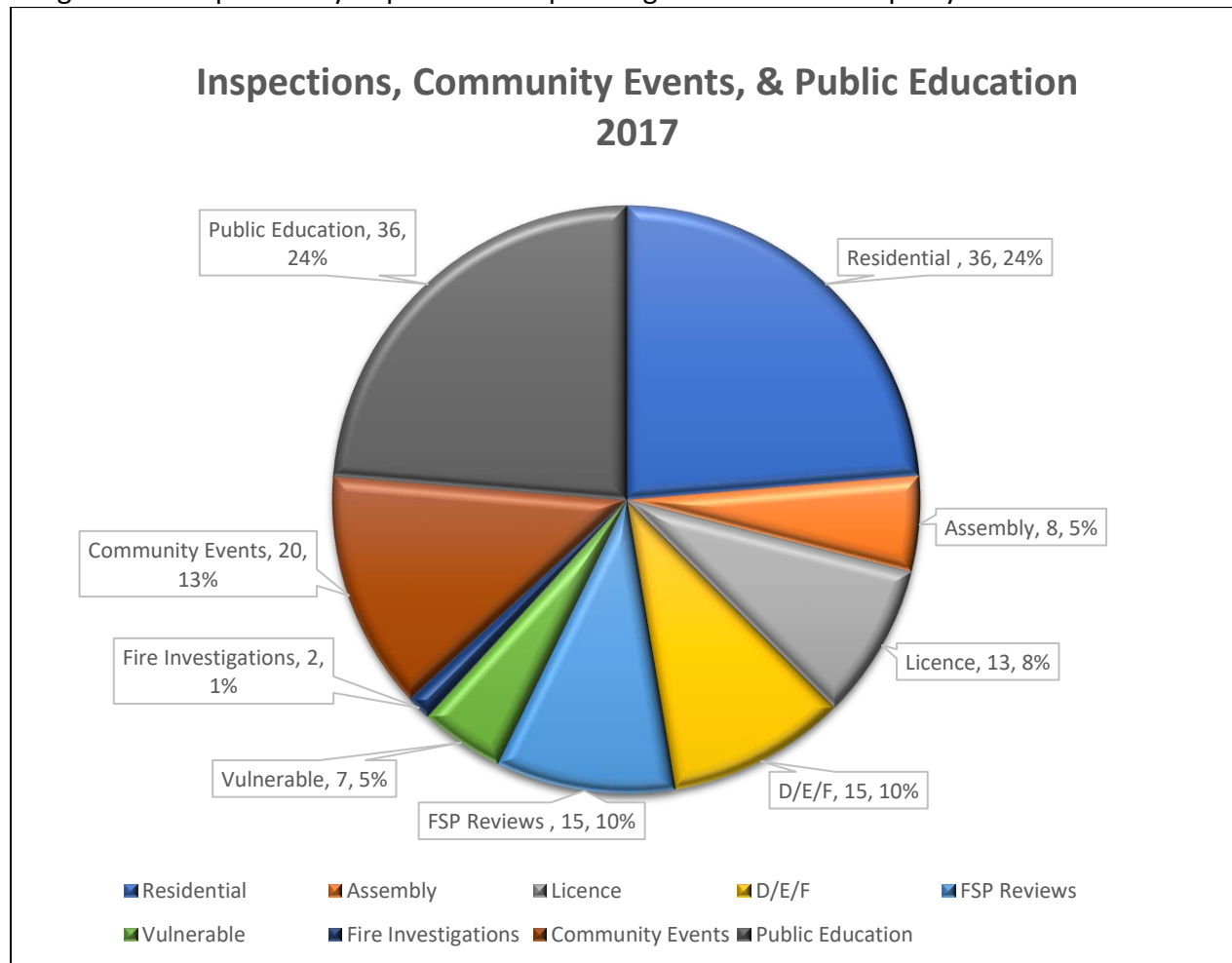
Tasks and Activities	Estimated Days Allocated	Rationale for estimated days allocation
Fire Safety Plan Review	15	based on number of Fire Safety Plans in 2017
Community Events	20	based on the number of events in 2017
Public education days	36	based on the number of public education days in 2017
Integrated Risk Management Tool	15	IRM tool to be initiated
Simplified/Community Risk Assessment	5	SRA to be updated annually
Vulnerable Occupancies	7	6 vulnerable occupancies and 1 group home
BnB's / Motels - inspect/educate	7	3 BnBs, 4 motels
Coordinate Smoke Alarm/CO program	5	Time to coordinate smoke alarm/CO program
Multi-residential	20	15 multi-residential buildings and 5 downtown apts
Residential Inspections	18	36 inspections in 2017 1/2 day each
Assembly inspections	5	10 assemblies 1/2 day each
Licence inspections	7	7 licensed premises
Fire Investigations	4	based on the number of investigations in 2017
Schools/Nurseries/Day-Care Facilities	5	5 schools, daycares and nurseries
Recreation Centres/Arenas/Performance Venues	3	3 sites within the municipality
Commercial, Business, Industry	15	based on 2017 inspections
Farm / Agricultural properties	15	estimate by FD for initiative to reduce risk of barn fires
Code Enforcement	10	est. - infractions take follow up, possible court time, etc
Media (local radio/newspaper), social media	10	based on 90 minutes a week
Annual Vacation	15	
Stat Holidays	10	
Training	5	
Sick Leave	5	
Estimated days required	257	

To assist in the forecast, we have estimated the number of days using the above chart, the Municipality's inspection frequency chart, using the number of Fire Prevention activities in 2017 for the request / complaint driven inspections, discussions with the previous Fire Chief, the Acting Fire Chief and the Fire Prevention Officer. For residential inspections we have allocated a half-day. For all other inspections we have allocated a day of effort. The time allocations include travel, pre-inspection data gathering, the inspection, teachable moments, report documentation, and data entry into the RMS.

Using these numbers, we have a rough estimate of 257 days. It should be noted that the activities in 2017 related only to the response area of MDFS. This role would assume responsibility for the entire Municipality and potentially increase those numbers.

It would be prudent for the FPO to start allocating any spare time to developing the Community

Risk Assessment that will be required in 2024. Further, additional available time could be assigned the responsibility of pre-incident planning across the Municipality.



The CFAI outlines the following in relation to fire prevention and public education:

- A public education program is in place and directed toward reducing specific risks in a manner consistent with the agency's mission and as identified within the community risk assessment and standards of cover. The agency should conduct a thorough risk-analysis as part of activities in Category 2 to determine the need for specific public education programs.

Along with the information noted in the previous paragraphs, the utilization of existing resources is a cost-effective option for the promotion of fire prevention and public education programs. To accomplish this, some fire departments have trained most, if not all their fire officers to be certified to conduct fire prevention/public education related inspections and programs. This not only brings more resources to the table, it also enhances the level of fire safety awareness by those trained staff.

As such, it is recommended that the Municipality of Meaford Fire Department move towards the training and certification of its Fire Officers in the areas of fire prevention and public education trained and certified to at least:

- NFPA 1031 – Fire Inspector I, (with Ontario specific training) and
- NFPA 1035 – Fire and Life Safety Educator I

3.7 Additional Public Educational Considerations

Home Fire Sprinklers

The NFPA, along with the Ontario Association of Fire Chiefs are strong supporters of home sprinkler systems as a way to reduce the risk to life and property from fire.

In a recent NFPA on-line article, it was found that due to the rapid response of fire sprinklers, they can dramatically reduce the heat, flames, and smoke produced in a fire. Properly installed and maintained fire sprinklers help save lives, reduce the risk to firefighters, and reduce damage.

Fire sprinklers have been around for more than a century, protecting commercial and industrial properties and public buildings. What many people don't realize is that the same life-saving technology is also available for homes, where roughly 85% of all civilian fire deaths occur.

Facts about home fire sprinklers:

Automatic sprinklers are highly effective and reliable elements of total system designs for fire protection in buildings. According to an American Housing Survey, 4.6% of occupied homes (including multi-unit) had sprinklers in 2009, up from 3.9% in 2007, and 18.5% of occupied homes built in the previous four years had sprinklers.

Source: U.S. Experience with Sprinklers (no Canadian data available)

- 85% of all U.S. fire deaths occur in the home.
- Home fire sprinklers can control and may even extinguish a fire in less time than it would take the fire department to arrive on the scene.
- Only the sprinkler closest to the fire will activate, spraying water directly on the fire. In 84% of home fires where the sprinklers operate, just one sprinkler operates.
- Smoke detectors reduce the risk of fire fatalities by approximately 33%, while automatic fire sprinkler systems cut the risk of dying by about 80%.
- In a home with sprinklers, the average property loss per fire is cut by about 70% (compared to fires where sprinklers are not present.)

- The cost of installing home fire sprinklers averages \$15.00 per sprinklered square metre.

The Home Fire Sprinkler Coalition (HFSC) is a leading resource for accurate, non-commercial information and material about home fire sprinklers for consumers, the fire service, builders, and other professionals.

By working with the developers and the public in promoting the installation of home sprinkler systems, the Municipality of Meaford can demonstrate a pro-active approach to educating the public on another viable option for home owners to help reduce the risk from fire. As such, it is recommended that Municipality of Meaford investigate this safety initiative as part of their fire prevention and public education initiatives, especially in the more rural areas and in residential developments targeting seniors.

The Town of Whitchurch-Stouffville has successfully completed an initiative where a developer included fire sprinkler systems in every new home in a neighbourhood they were constructing.

Website & Social Media

A stronger website presence should be investigated that would aid in providing greater fire prevention education to the residents and visitors within the Municipality of Meaford. The current website does have information providing a general outline of emergency services, some fire safety information and links that pertain to fire safety, however, it could be enhanced to make it more interactive and focused on demographic targets.

One recommendation, from an inquest in East Gwillimbury, was for municipalities to inform the community what their service levels are. This education can be accomplished on the webpage as well as in person when presenting information to various groups. Additional educational material can also be uploaded or linked from the webpage. This information should pertain to the known hazards that are within the community and provide detailed directions on how the people can mitigate or respond to events that will inevitably occur.

A corporate social media policy should be in place to guide the use of this powerful tool that has the capacity of reaching many people. Providing links within social media messages, that go back to further details on the webpage, will help. Most people want to act in a reasonable manner to ensure their own, and their families, safety and the Fire Department's role is to provide the direction to act in the best way. Utilizing multiple sources and tools to provide Public Education is essential.

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
12	A single fire prevention/education program should be established for the entire Municipality to ensure consistency in a standard format. Conduct a comprehensive review and revision of the fire prevention policies and procedures to update existing practices and, where necessary, implement additional policies and/or procedures to assist staff in prioritizing work, sustain certification, and to ensure all programs and activities are delivered to customers in a consistent manner.	No identified costs other than staff time	Short-term (1 – 3 years)
13	It is recommended that a single Simplified Risk Assessment/Community Risk Assessment be developed for the entire Municipality and that the Simplified Risk Assessment/Community Risk Assessment review be conducted every four (4) years, along with the Establishing By-law. The presentation of both documents to the newly sitting council, at the beginning of the council term, will allow the members to understand the scope of the Fire Department and the financial needs to sustain it. Upon completion of an updated Simplified Risk Assessment/Community Risk Assessment, the fire department should adjust the prevention and education programs, as required, to respond to the findings of the assessment, and the Fire Chief should recommend to Council the most appropriate Fire Prevention and Inspection Policy.		

14	It is recommended that a Fire Inspector(s) for the Municipality of Meaford be certified to the National Fire Protection Association (NFPA) 1031 (Level 1 minimum) with the Ontario specific training and appropriate training to deal with Vulnerable Occupancies. It is recommended that a formal delegation of power be presented to the Fire Inspector in accordance with the Fire Protection and Prevention Act (FPPA) 6(6), if the Fire Inspector is not the Fire Chief.	No identified costs other than staff time	Short-term (1 – 3 years)
15	All non-single-family residential building stock within the Municipality of Meaford should be assessed with the IRM tool, and that the Fire Chief(s) uses the data from the IRM to make changes to the Fire Prevention and Inspection Policy for Council to consider.		
16	It is recommended that the Meaford and District Fire Department and Inter-Township Fire Department move towards the training and certification of its Fire Officers in the areas of fire prevention and public education trained and certified to at least: NFPA 1031 – Fire Inspector I and NFPA 1035 – Fire and Life Safety Educator I.	Training of Fire Officers to NFPA 1031 – Fire Inspector I, and NFPA 1035 – Fire and Life Safety Educator I can be done in-house requiring staff time	
17	It is recommended that the fire department utilize the records management system program to implement a process to track all prevention and education activities across the Municipality. This should include core programs such as the Home Smoke Alarm Program, distribution of fire safety education materials, and inspections.	No identified costs other than staff time	

18	Those conducting Fire Safety Inspections and issuing Fire Inspection Orders within the Municipality of Meaford should receive the training necessary as provided by the Ontario Fire College. Note: ITFD is not using the Fire Inspection Orders format and should move to the new standard.	Training costs for the Fire Prevention Officer/Inspector will be based on the qualifications and experience of the person hired to fill this position	Short-term (1 – 3 years)
19	It is recommended that the Municipality hire a full-time Fire Prevention Officer/Inspector with responsibility for the Fire Prevention Program for the entire Municipality. This person will be responsible for the updating of the Simplified Risk Assessment/Community Risk Assessment, implementing the Integrated Risk Management program, conducting inspections, fire code enforcement, fire investigations, coordinating public education programs, etc. across the Municipality.	Hiring a Fire Prevention Officer/Inspector - \$75,000 plus benefits	
20	Municipality of Meaford Fire Department(s) should investigate Home Fire Sprinkler Installation safety initiative as part of their fire prevention and public education initiatives, especially in the more rural areas and in residences designed for seniors.	No identified costs other than staff time	
21	It is recommended that a stronger website and social media presence be investigated that would aid in providing greater detail to the residents and visitors within the Municipality of Meaford.		

SECTION 4: Emergency Response

- 4.1 Call Volume & Trends
- 4.2 Types of Calls
- 4.3 Apparatus Deployment
- 4.4 Response Staffing
- 4.5 Firefighter Deployment & Safety

Section 4: Emergency Response

4.1 Call Volume & Trends

The following charts identify a comparison of call volumes, response types, and the response breakdown from the two stations.

The Meaford & District Fire Department and Inter-Township Fire Department response times are calculated differently.

The OFMEM definition of response time is from “dispatch time, to time of arrival at the incident”. This response time does not include the time it takes to receive and dispatch the call.

MDFD calculates their response time from the time the fire pager tones activate, to the time it takes to get to the fire station, get on the firetruck, and drive to the emergency scene location.

ITFD calculates their response time from the time the fire pager tones activate to the time the first volunteer firefighter arrives on scene, driving directly. Further, the ITFD rounds the response times to the lower minute, instead of calculations by second. The differences in calculation methods make it difficult to compare response statistics directly.

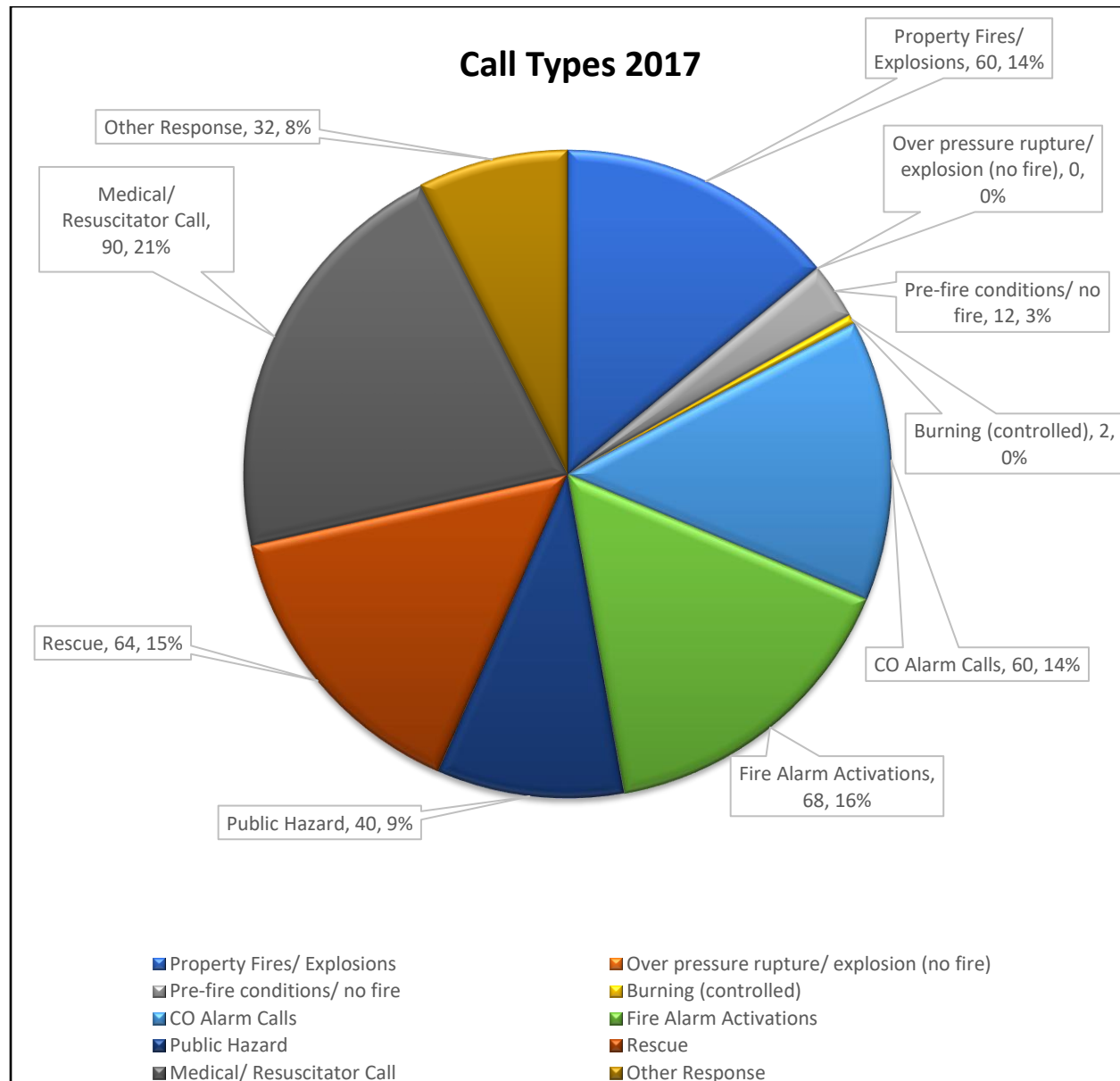
It is recommended that Standard Operational Guidelines (SOGs) consistent with OFMEM direction be developed that outline the incident data required and the process for capturing this data.

Fire department response time is a function of various factors including, but not limited to:

- The distance between the Fire Department and response location
- The layout of the community
- Impediments such as weather, construction, traffic, road networks
- Notification time
- Assembly time of the firefighters, both at the fire station and at the scene of the incident

The following sets of figures (using the supplied data) help to identify the call volumes, types of calls that are creating the bulk of response demands, and which station(s) are called upon the most for these responses.

FIGURE(S) 5: Comparison of Call Types and Percentages for 2017



As illustrated in the above chart, the top three types of calls within the Municipality (MDFD and ITFD combined) are:

1. Medical/resuscitator, which account for 21% of overall responses
2. Fire alarm activations, which account for 16% of overall responses
3. Rescue calls (e.g. motor vehicle collisions), which account for 15% of the overall responses

Based on this information, the percentage comparison gives the Fire Chiefs and their staff the ability to monitor where the bulk of their resources are being utilized. This also offers greater focus for required training programs to ensure that the firefighters are receiving training related to the types of responses that will demand a higher skill set.

While structure fires are a small portion of the calls that the fire department responds to, they are the most complex calls and pose one of the greatest risks to both the building occupants and the firefighters. These calls require significant resources including firefighters, apparatus, PPE, and other specialized equipment to allow the firefighters to perform their roles safely and effectively. Further, they require a significant amount of training and education, both on the part of the firefighters and command staff. So, while there are relatively few in numbers, they do require significant investment in training, capital, and operational funds.

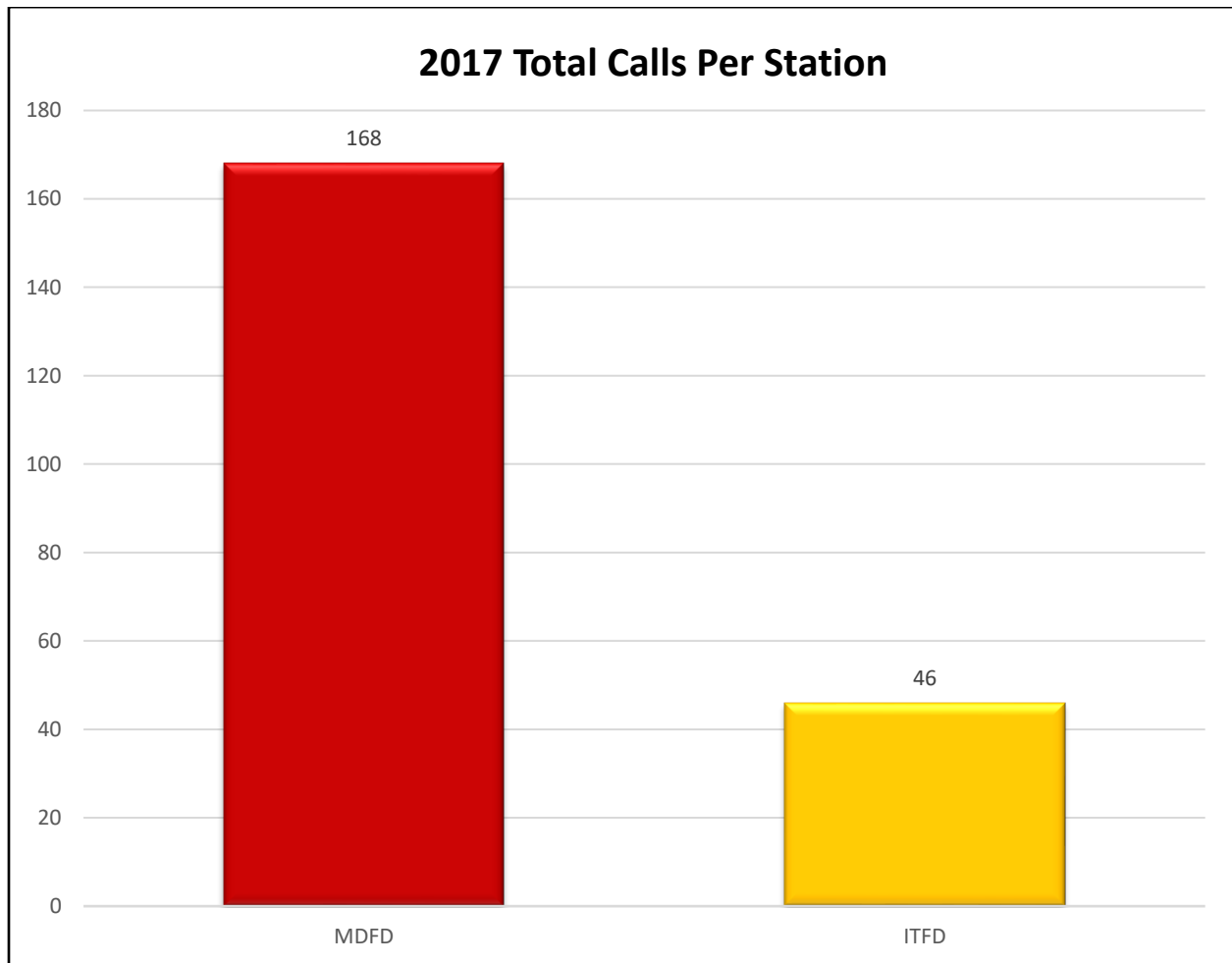
The following charts are a comparison of calls for service by the fire stations. The charts will note:

- Total calls per year by fire station
- An overview of the 2017 call breakdown
- The 80th percentile numbers for travel times and total response times

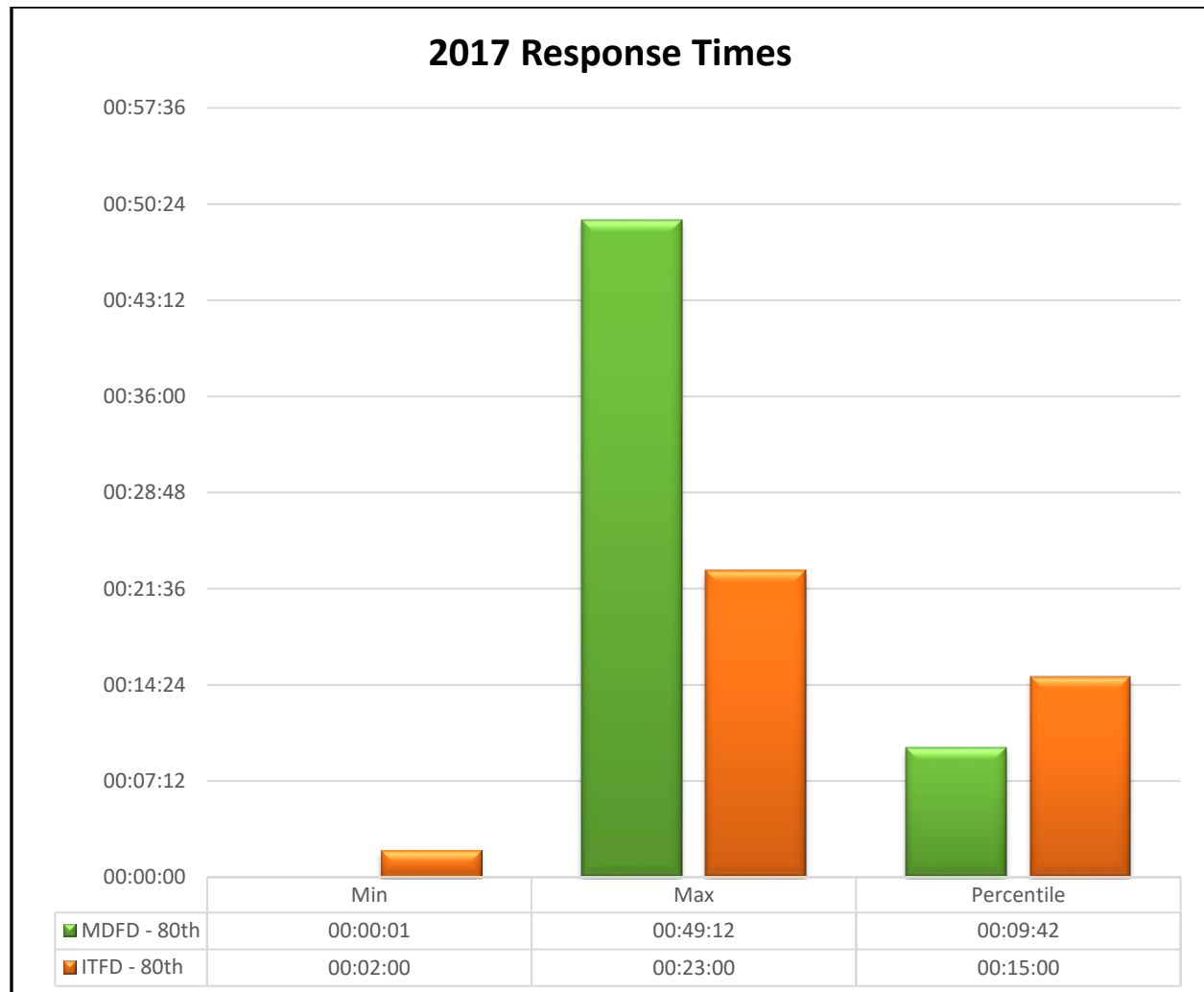
Note: The 80th percentile criterion is the recommended practice that is endorsed by the National Fire Protection Association (NFPA) and the Commission on Fire Accreditation International (CFAI). This data is considered more accurate since it is evaluating the times based on 80 percent of the calls, as opposed to averaging the times at the 50th percentile. For example:

- ***8 out of 10 times the fire department arrives on scene in 14 minutes or less. Which means that only 20 percent of the time they are above that 14-minute mark, as opposed to 5 out of 10 times the fire department arrives on scene in 14 minutes or less, which means that 50 percent of the time they are above the 14-minute mark.***
- ***Travel Time is the time tracked from when the fire vehicle has left the station until arrival at the incident location.***
- ***Response time is the total time from receipt of call (on 9-1-1) to the time the fire vehicle arrives at the incident location.***

Total Number of Calls by Station for 2017



2017 Response Times and 80th Percentile Comparisons by Station



Note: The response time data was provided by the fire departments. The call(s) where there was a 1 second response time are most likely to have been calls called in by the firefighters when they were out of station and the public approached the firefighters directly.

Extended delay calls occur when there is difficulty accessing a scene. These often occur when a rescue is required in a forested area where vehicle access is not available, and firefighters must reach the scene on foot or off-road vehicle (e.g. snowmobile, ATV).

ITFD calculates their response time from the time the fire pager tones activate to the time the first volunteer firefighter arrives on scene, driving directly. Further, the ITFD rounds the response times to the lower minute, instead of calculations by second. The differences in calculation methods make it difficult to compare response statistics directly. Their response times would be longer if using the same method of calculation as MDFD.

4.2 Types of calls

As can be seen in the charts in Section 4.1 Call Volume and Trends, the individual station data shows that the most common types of incidents responded to are Medical Calls, Alarm Calls, and Rescue Calls of various types.

In combining the station's data, we can see the following incident numbers:

TABLE 4.1 – Common Incident Types

Year	Medical Calls	Alarm Calls	Rescue Calls
2012	68	18	29
2013	61	32	29
2014	67	27	40
2015	51	53	27
2016	50	37	29
2017	45	34	32

Response programs need to be focused on the types of incidents that occur most frequently. The statistics aid in determining funding, apparatus, equipment, and training needs. The data also provides council with historic incident types when reviewing the Establishing By-law and the services the Municipality should offer.

Medical calls make up approximately 21% of the fire department calls within the Municipality, the single most frequent type of call the fire departments respond to. The number of medical calls has been on a decline since 2012, decreasing from 68 calls in 2012 to 45 in 2017. The question has been posed as to whether the fire department should be doing medical calls or if the first aid component of the training can be reduced.

The chart below lists the medical calls the fire department responds and does not respond to, including those calls where the fire department is only called when the ambulance will have a delayed response of 15 minutes or more. It is the fire department that determines the criteria that they will respond to.

Meaford - FIRE DEPARTMENT
Tiered Response Criteria

	TIER	TYPE OF CALL	IF EMS RESPONSE GREATER THAN	CODE PRIORITY
1	NO	Abdominal Pain	0 Minutes	Select Code
2	NO	Allergy Reaction	0 Minutes	Select Code
3	NO	Back Pain	0 Minutes	Select Code
4	NO	Behavioral Problems	0 Minutes	Select Code
5	NO	Bleeding (Non-Traumatic)	0 Minutes	Select Code
6	NO	Bleeding in Pregnancy	0 Minutes	Select Code
7	NO	Breathing Problems	0 Minutes	Select Code
8	NO	Burns	0 Minutes	Select Code
9	YES	Cardiac Arrest / VSA	0 Minutes	Code 4 and 3
10	YES	Chest Pain / Heart Problem	15 Minutes	Code 4
11	NO	Child Birth / Labour	0 Minutes	Select Code
12	YES	Choking	0 Minutes	Code 4 and 3
13	YES	Convulsions/Seizure	0 Minutes	Code 4
14	NO	Diabetic Problem	0 Minutes	Select Code
15	YES	Electrocution	0 Minutes	Code 4
16	NO	Environmental Exposure - Heat	0 Minutes	Select Code
17	NO	Environmental Exposure - Cold	0 Minutes	Select Code
18	NO	Eye Problems	0 Minutes	Select Code
19	NO	Falls	0 Minutes	Select Code
20	NO	Generally Unwell	0 Minutes	Select Code
21	NO	Headache	0 Minutes	Select Code
22	NO	Inhalation	0 Minutes	Select Code
23	YES	MVC - Enclosed Seating	0 Minutes	Code 4 and 3
24	YES	MVC - Exposed Seating	0 Minutes	Code 4 and 3
25	YES	MVC - Person Struck	0 Minutes	Code 4 and 3
26	YES	MVC - Unknown Details	0 Minutes	Code 4 and 3
27	YES	Near Drowning	0 Minutes	Code 4
28	NO	Overdose	0 Minutes	Select Code
29	NO	Stroke / CVA	0 Minutes	Select Code
30	NO	Trauma (Blunt) / Assault	0 Minutes	Select Code
31	NO	Trauma (Penetrating) / Wound	0 Minutes	Select Code
32	YES	Unresponsive / Decreased Consciousness	0 Minutes	Code 4 and 3
33	YES	Unknown	15 Minutes	Code 4

34	YES	Code 4 and 3	Farm Accidents
35	YES	Code 4 and 3	Industrial Accidents

In 2017 there were, on average, 11 firefighters responding to medical calls, receiving 1 hour of pay per call (average). The average salary cost to respond to a medical call was \$375.76 which equates to \$16,909 for 2017. There are a couple of opportunities that can be examined to reduce the cost of the medical calls including assigning specific firefighters to respond to medical calls (e.g. some municipalities will assign 4 firefighters per platoon for medical calls) and/or working with the paramedic service to reduce the number of medical responses.

It has been reported that the MFD has responded to three successful cardiac arrest resuscitations in the past three years. These are people who were clinically dead and successfully revived by the joint work of paramedics and firefighters. During a cardiac arrest,

every minute of delayed CPR reduces the chances of survival by 10%, therefore rapid response is critical in these situations.

With one ambulance based in the downtown area of Meaford, it may be tied up on calls or assigned elsewhere creating a potentially delayed response. On occasion, there is concern that the fire department is sent out to calls where there is not a need for the firefighters. Further, there is concern that the ambulance service may use the firefighters as a stopgap for inadequate ambulance staffing. Currently there is inadequate data to determine how often this occurs. Improved data management would provide for improved analysis.

The Fire Chief should meet with the EMS Chief to identify concerns, review the tiered response agreement, and attempt to further reduce the number of medical calls.

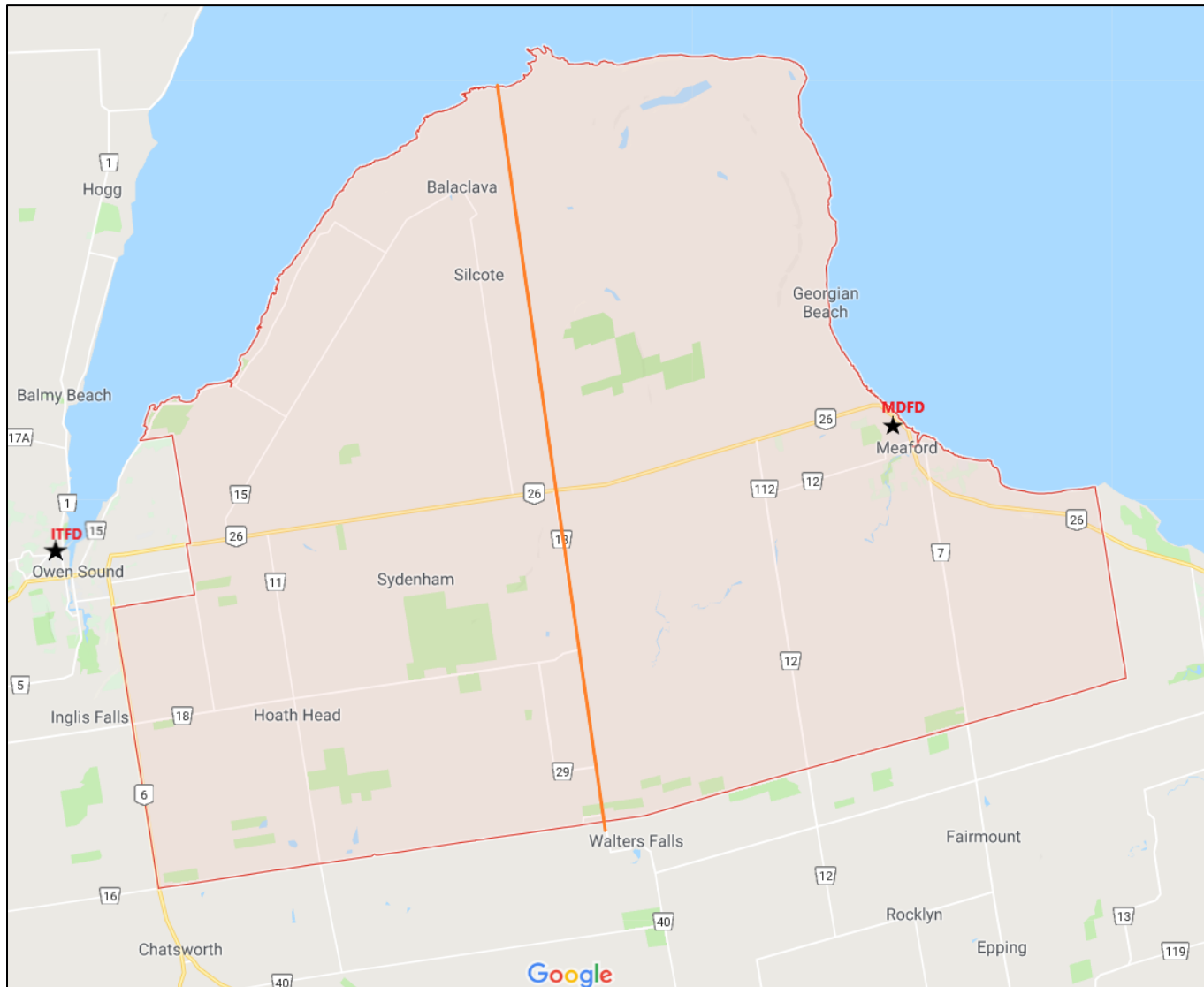
The Medical First Responder first aid training is standard in most south/central Ontario fire departments and provides important tools that may be required on the fire grounds, on rescues (e.g. motor vehicle collisions), or on medical calls. This training should be maintained.

4.3 Apparatus Deployment

Apparatus deployment can be a complex matter if historic and personnel demands are sought to be met. Change can be a challenging process and has shown to be so in Fire Services because of the community entrenchment for many years. Historically, villages and neighborhoods were left to their own devices to raise funds and provide their own fire protection. In today's Fire Service, service levels are set by municipal council and the funding of these services is primarily through municipal taxation.

In review of the station response zones, the call volumes, and call types, a realignment of station response zones is warranted (see Map 4.1 below). The key question to ask while reviewing these boundaries is, "Who can get to the incident in the most efficient way to begin operations on scene?" Further details and recommendations can be seen in Section 4.5 – Firefighter Deployment.

FIGURE 4.1 - The Municipality of Meaford Boundaries and Approximate Fire Station Locations/ Response Areas



4.4 Response Staffing

As discussed in Section 2.4 NFPA 1720 - *Standard for the Organization and Deployment of Fire ... Operations to the Public by Volunteer Fire Departments*, the number of firefighters on scene in a given time is outlined in the various zones. Predominantly, the greater area of the Municipality of Meaford falls in the “rural” area, as described in NFPA 1720. As noted in TABLE 2.1 - NFPA 1720 Standard (copied below), the population density would have to be <500 people per square mile (193 people per square kilometre). According to the 2016 Census, the population density for the Municipality of Meaford is 19 people per square kilometre.

Demand Zone	Demographics	Minimum # of firefighters responding	Response time (turnout + travel) in minutes	Performance Objective
Rural	<500 people per square mile <193 people per square kilometer	6	14	80%

In review of the response time data provided for the Municipality, the MDFD is meeting the 14-minute NFPA 1720 standard with an 80th percentile time of 9 minutes, 42 seconds in 2017.

The ITFD, using the first firefighter to arrive on the scene in their personal vehicle, has an 80th percentile of 15 minutes (rounded down) which is longer than the 14-minute NFPA 1720 standard. The data provided does not include the arrival of the fire apparatus, which presumably would be extended from the time noted.

While the MDFD calculates arrival-time based on the arrival of the fire apparatus, the ITFD calculates their response time from when the first firefighter arrives on scene. Using the first firefighter arrival makes it difficult to determine when the appropriate response (required equipment and firefighters) is on scene to effectively address the emergency at hand (e.g. fire suppression for fires, extrication equipment for motor vehicle accidents, defibrillator and oxygen for medical emergencies). Further, while MDFD calculates response time utilizing minutes and seconds, ITFD calculates response time using the minutes only, which can under-calculate responses by up to 59 seconds.

While there is a requirement for 6 firefighters to be on scene to meet the standard, neither fire department statistically monitors how many firefighters are on scene within the response standard. We do know that the MDFD normally has one truck on scene with a minimum crew of 4. ITFD will have one firefighter on scene at the 15-minute mark 80% of the time.

It is recommended that the Municipality use a single data management system for the collection of call data from both fire departments. An SOG should be developed to aid all

members of both fire departments in completing call reporting in the same manner including the number of firefighters arriving on scene within 14 minutes. All call responses in the Municipality should be reported to the Administrative Assistant who can enter the details into a single data base. This will allow the Municipality to more accurately track and monitor the performance of the responses.

4.5 Firefighter Deployment & Safety

Every time the pager activates for an incident response, there is potential for significant danger involved for the firefighters and the public. Two key areas of greatest threat, or critical events, for the Municipality of Meaford firefighters are (listed by greatest volume):

1. Motor vehicle collisions

- The responses to Highway 26 and other main thoroughfares do not need much explanation for the dangers they possess. Unlike highway workers who take time to establish work zones, utilizing concrete barricades and trucks with a crash cushion, etc., the Fire Department quickly sets up safe zones by parking fire apparatus in a certain fashion. Along with this apparatus parking, pylons, flares, safety vest, and lighting are used creating a temporary workplace. Even with all these features in place however, danger still exists.
- Currently, the Inter-Township Fire Department protocol is to have firefighters respond in their own vehicles while the apparatus responds from Owen Sound. Having firefighters park their personal vehicles along a busy roadway without indicators or protection creates a significant risk for the firefighters and approaching traffic who may not recognize the scene of the emergency due to the lack of emergency vehicles. Further, personal vehicles can cause further congestion along the shoulders of the roadway creating additional hazards.
- To minimize the exposure to danger, the Fire Departments must have active SOGs, based off Section 21 Guidance Notes #6-10 for responding to motor vehicle collisions. Training on these SOGs is essential.
- Responding to motor vehicle collisions in personal vehicles adds to the danger and congestion at scenes and should not be permitted.

2. Fires

- Response to fire events, whether they be vehicle, land, or structure, is considered one of the most dangerous occupations. Ensuring adequate staffing, apparatus, and equipment is essential for firefighter and public safety, and provides for efficient fire control and extinguishment. As an on-call fire service, timely responses are essential, as described in *Section 2: Service Delivery*. It is recommended that any large fire (including any structure fire) that is reported

automatically have a dual station response, regardless of time of day. It is easier to turn responders back if they are not needed compared to having them muster and respond when their need is recognized well into the event.

- Firefighters must be properly equipped to deal with the fire, including suppression equipment and proper PPE such as self-contained breathing apparatus. The danger of fire extends beyond immediate injury of heat and smoke and includes the long-term effects of the toxins found in the atmosphere around fires. Therefore, it is critical that firefighters utilize the appropriate PPE before approaching a fire. There is an increased risk of firefighters approaching a fire without SCBA or other PPE when they arrive in their personal vehicles before the fire apparatus. Further, there is additional risk of contamination spread when bunker gear used at a fire is placed back into the personal vehicles spreading the contaminants to family and other persons using or riding in the vehicle. This places both the fire department and the Municipality at higher risk of liability due to injuries and/or long-term illnesses (e.g. cancer).
- Personal vehicles can cause congestion around the fire scene and increase the potential for collision and traffic congestion.
- Responding to structure fires in personal vehicles adds to the health and safety risks, as well as the congestion at scenes and should not be permitted.

While the elimination of firefighters responding in their personal vehicles will statistically increase the response times based on the current ITFD method of tracking response times, it will not delay the actual firefighting or rescue operations, as they cannot commence until the first truck arrives. Having firefighters respond to the hall should not delay the first responding vehicles as they currently have firefighters responding to the hall to staff those vehicles. For volunteers living in the western area of the Municipality, a pick-up location could be established in the Hwy 26 Owen Sound town boundary area where these firefighters could be picked up by the responding vehicles from ITFD.

Water Tanker Shuttle Accreditation

Water Tanker Shuttle Accreditation is a process that provides assurance that adequate water can be brought to a fire incident from an alternate water supply other than a fire hydrant on a Municipal Water System.

There are two grades that are reviewed in the accreditation process. The first is the Dwelling Protection Grade which relates to the protection of personal dwellings. To attain the accreditation for this grade, the fire department must maintain a flow of 950 liters (200 imperial gallons) per minute for duration of two hours. The second grade is a Public Fire Protection Grade which focuses on the need for protection of commercial and industrial needs. To attain accreditation for this grade, the fire department must maintain a flow of 1900 liters (400 imperial gallons) per minute for duration of two hours.

What is involved in the testing? The test sites are selected and agreed upon by the testing authority and the fire department. The water dump site is selected as is a water source approximately five kilometres away in order to meet the Insurance Bureau requirements. To receive benefits of the Water Tanker Shuttle Accreditation, the building being assessed by an insurance company must be within 8 kilometres for Dwelling Protection Grade and 5 kilometres for the Public Fire Protection Grade to the nearest fire station. Secondly, the water source must be within 5 kilometres of the building. If the required flows are met, the building receives an additional grade point. This grade point difference could translate to savings in annual insurance costs. These savings are dependent upon the insurance company being used.

The fees for Water Tanker Shuttle Accreditation typically run \$3,000-\$5,000 and are required to be retested every 5 years. In addition to the fees, there will be salary costs related to the testing. Two companies provide this service in Ontario: Fire Underwriters Survey (FUS) and Fire Protection Survey Services.

It requires a minimum of three tankers to be successful at the accreditation. Currently, MDFD has a tanker and a pumper/tanker to fill the role. It would require the purchase of a third tanker, or if a second station was added, a pumper tanker could be added to the municipal fleet.

While annual savings on a residence valued at \$500,000 may range from \$0-\$700 depending on the insurance company, there are numerous insurance companies with individual policy calculations which they do not make public making actual savings difficult to predict.

The placement of a pumper tanker in the western portion of the municipality would provide the municipality 3 trucks capable of shuttling water and allow for the successful water tanker shuttle accreditation.

Dry Hydrants and Cisterns

High volumes of water are essential for large fires. In rural communities there is no water system for pressurized fire hydrants and the firefighters become dependant on bringing in the water via tanker truck. The tanker trucks must refill from a water supply, so they will often go back to fire hydrants.

In many communities, large cisterns are kept on municipal properties with dry hydrants that the fire department can use to “draft” from and refill the tankers. Alternatively, dry hydrants may be located at large bodies of water to make it easier to draft from a lake or stream. These cistern and dry hydrants are strategically placed so that the tanker trucks do not have to travel great distances to refill. The Municipality of Meaford does not have any cisterns or dry hydrants to provide a water source for the fire departments.

It is recommended that the Municipality investigate placing cisterns and dry hydrants in the

rural areas of the community to provide an emergency water source.

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
22	It is recommended that a response boundary realignment occur between the Meaford & District Fire Department and Inter-Township Fire Department to ensure that the quickest response (usually closest station) is dispatched.	No identified costs other than staff time	Short-term (1 – 3 years)
23	The practice of firefighters responding to fire calls and motor vehicle collisions in their personal vehicles should be eliminated as it creates significant health and safety risks to the firefighters and liabilities to the Municipality.	No associated costs	
24	Both Fire Departments must develop Standard Operating Procedures, based off Section 21 Guidance Notes #6-10 for responding to motor vehicle collisions.	No identified costs other than staff time	
25	The MDFD should undertake a Water Tanker Shuttle Accreditation process.	\$5,000 fee plus associated staff time	Long-term (7 – 10 years)

26	It is recommended that the Municipality investigate placing cisterns and dry hydrants in the rural areas of the community to provide an emergency water source.	A large water cistern \$10,000 - \$20,000 depending on the size of the tank and earthworks required for installation. Dry hydrants \$5,000 - \$10,000 depending on the work required to install the dry hydrant as well as ensuring the surface is suitable for fire trucks.	Mid to long-term (4 – 10 years)
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SECTION 5: Firefighter Training

5.1 Fire Training Program

5.2 Firefighter Skills Maintenance

5.3 Officer Development

5.4 Training Records

Section 5: Firefighting Training

5.1 Fire Training Program

A fire service is only capable of providing effective levels of protection to its community if it is properly trained (and equipped) to deliver these services. Firefighters must be prepared to apply a diverse and demanding set of skills to meet the needs of a modern fire service. Whatever the assigned position, the firefighter must have the knowledge and skills necessary to provide reliable fire protection.

During EMT's review, it was noted that both departments appear to be active in providing training to the staff, however, poor documentation at ITFD creates concerns. There is the adage that if something is not documented it did not occur. A lack of comprehensive documentation creates concerns for being able to demonstrate to the Ministry of Labour or other investigative bodies that each individual firefighter has shown proficiency in knowledge and skill evolutions, thus placing the fire department and municipalities in a potential liability.

The MDFD Fire Chief, in addition to his other responsibilities, is accountable for planning, coordinating, and tracking firefighter training and education, and identifying the training needs based on the industry standards and community requirements. The Chief is assisted by two Captains who lead or coordinate the training.

The MDFD has a well designed and well utilized fire training facility located behind the fire station. This facility has been built at minimal cost and the design has incorporated many training evolutions. This facility is a tribute to the Chief and firefighters who have helped design, build, and continually update the facility.



Challenges with the current training program include:

- Lack of available time for the Fire Chief with competing responsibilities and priorities
- Lack of available time for the on-call Captains and Lieutenants to function as the training officers in addition to their home, work, and firefighting responsibilities
- Ensuring proper documentation of training modalities for each firefighter
- Lack of documented proficiency assessments (credit is given for participation) during training modalities (ITFD)

- Lack of documented annual performance and competency evaluations for firefighters (ITFD)
- Scheduling training sessions
- Providing training to firefighters who miss training sessions
- Assessing the return to work training requirements for a firefighter who has been off-duty for three or more months
- Ensuring pre-plans are incorporated annually into the fire department training

Two relevant standards include NFPA 1201 and Commission on Fire Accreditation International category VIII: Training and Competency.

NFPA 1201 – Providing Fire and Emergency Services to the Public notes in relation to training and professional development that:

- **4.11.1 Purpose.** The Fire & Emergency Services Organization shall have training and education programs and policies to ensure that personnel are trained, and that competency is maintained to effectively, efficiently, and safely execute all responsibilities.

The Commission on Fire Accreditation International accreditation program has a specific section that evaluates the training component of a Fire Department. In this section the following points are noted:

- Category VIII: Training and Competency
 - *Training and educational resource programs express the philosophy of the organization they serve and are central to its mission. Learning resources should include a library; other collections of materials that support teaching and learning; instructional methodologies and technologies; support services; distribution and maintenance systems for equipment and materials; instructional information systems, such as computers and software, telecommunications, other audio-visual media, and facilities to utilize such equipment and services. If the agency does not have these resources available internally, external resources are identified and the agency has a plan in place to ensure compliance with training and education requirements.*

Based on EMT's review, many of the challenges identified with the MDFD training program are due to the lack of available time, both from the Chief who has many other responsibilities, and the Captains who have full-time jobs, families to care for, and regular firefighter responsibilities.

The preparation for training often requires as much time as the delivery of the training. Preparation includes the development of a lesson plan and safety plan, assembling materials and resources, reviewing the materials in advance, ensuring all equipment for demonstrations/practice are prepared and working properly, delivery of the material, confirmation that the participants understand the material and can apply it in practical scenarios, assessment of

participant skills, detailed documentation of the session, and individual student performance.

Firefighting is an inherently dangerous job and in the event of a firefighter injury or death, a primary focus of the investigation will be on the training program, its instructors, and its documentation. Increased staffing is required to allow for more time for the planning, coordinating, provision, and tracking of firefighter training.

While certification should be the focus, qualification can be used to prove competency. Within the NFPA Professional Qualifications Standards are a series of Job Performance Requirements (JPRs) in each individual standard. The essence of certification is to show before an impartial tester that the one being tested can complete certain random JPRs. Qualification means that the candidate has completed all the JPRs in practice and has the documentation to prove it.

It is recommended that the fire departments focus on completing training to a certified level.

It is recommended that all firefighters and officers who were not grandfathered, or who are not certified in their current position, complete the JPRs necessary for each level up to and including their current rank and position and this documentation be kept on file. Without this documentation, the individual, their supervisors, and the Municipality could be placed in a position of liability.

NFPA Professional Qualifications Standards outline what prerequisites are required for each level. What this means, for example, is that a firefighter cannot become certified to a Fire Service Officer Level 1 unless they first have NFPA 1001 Firefighter 1 and 2 along with NFPA 1072(472) Hazmat Operations. A co-requisite requirement for Fire Service Officer Level 1 is NFPA 1041 Fire Service Instructor Level 1. Updated Job Descriptions will outline responsibilities and required training levels in accordance with the NFPA Professional Qualifications Standards. This will ensure the Municipality is compliant with the *OH&S Act*.

NFPA 1201 – *Providing Fire and Emergency Services to the Public* notes in relation to training and professional development that:

- **4.11.1 Purpose.** The Fire & Emergency Services Organization shall have training and education programs and policies to ensure that personnel are trained, and that competency is maintained to effectively, efficiently, and safely execute all responsibilities.

To more formally verify that the Training Program is meeting the related NFPA program recommendations, it is recommended that the training staff identify:

- What training programs are required in relation to the services that Fire Departments are providing;
- The number of hours that are required to meet each of those training needs;

- Resources required to accomplish this training;
- Joint partnerships with bordering fire departments and private organizations/colleges that can be entered into to achieve the training requirements, and
- An annual program outline at the start of each year to the Fire Chief(s), with noted goals and expectations, which are measured and reported on with regards to completion success rate at the end of each year.

It is recommended that SOGs be developed that outline the process to receive training, along with training expectations and ensuring the detailed documentation of the training programs. This, in conjunction with the Job Descriptions, will provide a new firefighter a clear path to promotion.

Commission on Fire Accreditation International

The CFAI Accreditation program has a specific section that evaluates the training component of a fire department. In this section the following points are noted:

- Category VIII: Training and Competency
 - *Training and educational resource programs express the philosophy of the organization they serve and are central to its mission. Learning resources should include a library; other collections of materials that support teaching and learning; instructional methodologies and technologies; support services; distribution and maintenance systems for equipment and materials; instructional information systems, such as computers and software, telecommunications, other audio-visual media, and facilities to utilize such equipment and services. If the agency does not have these resources available internally, external resources are identified, and the agency has a plan in place to ensure compliance with training and education requirements.*

For neighbouring fire departments to work most effectively, they should train together on a regular basis. With two fire departments covering the Municipality, it is important that they train together to improve cooperation and coordination during calls where both departments are responding. It is recommended that the MDFD and ITFD schedule joint training opportunities based on the most typical calls they would work together at.

5.2 Firefighter Skills Maintenance

In the development of regular training, the JPRs for every position should be listed. The Chief Officers should then review the JPRs and rate each. Those that are rated critical should be utilized as often as possible with all JPRs covered at least once annually. Other ratings can be set for the remaining JPRs as required.

When producing the training calendar, emphasis needs to be placed on the required JPRs for the given training event. The development of the Lesson Plans should then revolve around the JPRs for that training evolution in a scenario-based practice. When the firefighters and officers complete the training, the instructors should then document the completion of the specific JPRs by the individual. For skills maintenance training, it is recommended that JPRs become the focus in a scenario-based model and that those who complete the specific JPRs have such documentation on file.

5.3 Officer Development

It has been previously discussed that there are legislative requirements when promoting someone into a supervisory position. *The Occupational Health and Safety Act*, in Section 25 (2) (c) states, “when appointing a supervisor, appoint a competent person”. A competent person is defined as someone who:

- is qualified because of knowledge, training and experience to organize the work and its performance;
- is familiar with this *Act* and the regulations that apply to the work and has knowledge of any potential or actual danger to health or safety in the workplace.

Promotion of an individual should be based on merit. The NFPA 1021 - Fire Officer Professional Qualifications is divided into four levels. Level 1 is the entrance level and can be viewed as a Senior Firefighter or Lieutenant level for the Municipality. Level 2 can be viewed as the standard for Captain. Level 3 can be viewed as the standard for a Deputy Chief and Level 4 can be viewed as the standard for Fire Chief. NFPA 1021 training prepares the officer candidate to enter the role, however, ongoing training is required to develop the officer corps. Following SOGs already referenced in this plan will guide the process for promotion and required training. Updated job descriptions will provide firefighters with the prerequisite training for promotion. It is recommended that all promotions into an officer level be consistent with the NFPA standards and local SOGs.

5.4 Training Records

Adequate training records are essential in the fire service. Without proper training records the individual, the supervisor, and the employer are at risk. Each training or practice event should be clearly documented. Training records include:

- Attendance sheets
- Lesson plans
- Safety plans
- Incident reports
- JPRs for each firefighter
- Notes
- etc.

These documents are required for each and every session. It is recommended that all training records be kept in a records management system. This will provide ready access to the JPRs required to be completed by each individual on an ongoing basis.

To assist the Chief and officers with the training program, it is recommended that the MDFD appoint Platoon Training Instructors for each Platoon and that the instructors be certified at a minimum as a Fire Service Instructor Level 1 (NFPA 1041).

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
27	It is recommended that the MDFD appoint Platoon Training Instructors for each Platoon and that the instructors be certified at a minimum as a Fire Service Instructor Level 1 (NFPA 1041).	Additional stipend for three Training Instructors may range from \$6-\$18,000	Short-term (1 – 3 years)
28	It is recommended that the fire departments focus on completing training to a certified level.	All training comes with the cost of hourly wages for those attending.	
29	It is recommended that for skills maintenance training, Job Performance Requirements become the focus in a scenario-based model for each firefighter level, up to and including their current rank and position and this documentation be kept on file.	There may be costs for training and expenses if the program is remote or contracted externally.	

30	To verify in a more formal manner that the Training Program is meeting the related NFPA program recommendations, the training staff should identify: a. What training programs are required in relation to the services that the fire departments are providing; b. The number of hours that are required to meet each of those training needs; c. Resources required to accomplish this training; d. Joint partnerships with bordering fire departments and private organizations/colleges that can be entered into to achieve the training requirements; and e. An annual program outline at the start of each year to the Fire Chief, with noted goals and expectations, which are measured and reported on in relation to completion success rate at the end of each year.	No identified costs other than staff time	Short-term (1 – 3 years)
31	Develop Standard Operating Guidelines that outline the process to receive training along with training expectations and the requirement for detailed training records.		
32	It is recommended that all promotions into an officer level be consistent with the National Fire Protection Association (NFPA) standards and local Standard Operating Guidelines.		
33	It is recommended to keep detailed training records for both fire departments in a records management system.		

SECTION 6: Administration

- 6.1 Fire Department Composition
- 6.2 Policies, Procedures, & Section 21
Guidance Notes
- 6.3 Record Keeping & Information
Management
- 6.4 Customer Service, Media, & Public
Relations

Section 6: Administration

6.1 Fire Department Composition

The Meaford & District Fire Department has an approved complement of:

- 1 Full-time Fire Chief
- 1 POC (Paid On-Call/Volunteer) Station Commander
- 3 POC Captains
- 3 POC Lieutenants
- 30 POC Firefighters
- 1 Contracted Fire Prevention Officer (last half of 2018)
- 10% of an FTE Admin Support

Compared to 2015, this is a significant reduction in paid hours. In 2015 there was a full-time Fire Chief, full-time Deputy Fire Chief, full-time Administrative Assistant, and a 40% Fire Prevention Officer.

In addition to the above structure, the CAO and Municipal Council can be added above the MDFD Fire Chief.

The Inter-Township Fire Department is made up of 39 firefighters plus two full-time staff:

- Full-time Fire Chief
- Full-time Deputy Fire Chief
- POC Captains
- POC Lieutenants
- POC Firefighters
- Contracted Fire Prevention Officer

The ITFD Fire Chief reports to a board of directors with two representatives (out of 6 board members) from the Municipality of Meaford.

Both fire departments are served by paid on-call (volunteer) firefighters who respond 24/7. The actual number of firefighters varies due to attrition.

The MDFD is allocated 10% of the work time of the Legislative Services Coordinator / CEMC. This equates to 3.5 hours per week. The responsibilities and tasks that are expected to be completed within the 3.5 hours include: data entry into Fire Pro; firefighter payroll; MTO invoicing; data entry of Marque Fire (insurance claims); invoice tracking for fire calls from ITFD; booking and coordinating the use of the training room; etc. While there is 10% of the position time allocated to the fire department, the tasks are taking much more time than assigned, which means that compromises must come from elsewhere.

The department previously had a full-time Administrative Assistant, but it was felt a full-time position was not warranted. While a full-time position may not be required, it is recommended that additional fire department administrative support hours be allocated to increase from 3.5 hours per week to 15 - 21.5 hours per week and that the workload be monitored. These additional hours will be required for data entry and maintaining the records management system (e.g. data collection, fire responses, training records, maintenance records).

In the previous section, *Section 5: Firefighter Training*, it was recommended that the position of Platoon Training Instructor be added to the MDFD. This does not increase the number of firefighters, but simply reassigns training responsibilities.

6.2 Policies, Procedures, & Section 21 Guidance Notes

In our research of the fire service governance documents, there was no mention of the general Municipal Policies. As with many municipalities, there is no doubt that the Municipality of Meaford has several policies that would impact the fire departments. These need to be clearly articulated to the Fire Department and contained within the SOGs and Section 21 Guidance Notes for continued review.

The Meaford & District Fire Department SOGs are current (reviewed in past two years) and wide-ranging.

The Fire Service is working towards ensuring that a complete and current set of directives and standard operating procedures are in place. These documents are a critical aspect of day-to-day operations of a fire department. These documents also contribute to the development of training programs for department staff.

There is no set standard for how many operational guidelines/procedures are required by a fire service. This depends on the services offered by the fire service and the level of each service being offered. There is a question of what type of equipment is being used and by whom, along with the level of training that is required for that piece of equipment. Appendix H has a list of potential SOG areas from the Federal Emergency Management Agency (US) to be considered.

A fire chief must review all the services and associated levels of service being offered to the community and identify what procedures or training program(s) are required for the staff.

Most fire departments collate their standard operating procedures into seven broad categories to ensure they are addressing the needs of each branch, such as:

- Administration – general human resources functions, vacations, overtime, budgets and other things related to the general day-to-day administrative duties
- Fire Suppression – covering all operations such as firefighting, medical, hazardous materials, rescue, fire ground accountability, water supply and incident command

- Fire Prevention – inspections, public education, code enforcement, school and other public programs
- Training – training programs for all branches within the department, which would range from junior to senior officer ranks
- Mechanical – guidelines relating to inspection of vehicles and equipment
- Facilities – care and maintenance of the fire station
- Special Operations – such as high angle rescue, water rescue, etc.

Many of the current SOGs for the Inter-Township Fire Department are dated 2007 and 2008. It is recommended that the ITFD review and update all SOGs and that all SOGs are reviewed and updated as applicable every three years.

It is recommended that a committee be struck involving firefighters and officers from both fire departments to ensure that SOGs related to fire ground operations and any dual response calls within the Municipality are compatible with integrated operations. This process should be directed by the Fire Chiefs with the final version shown to the CAO.

Section 21 Guidance Notes are developed by a committee established by the Minister of Labour. The Section 21 reference is derived from the *Occupational Health and Safety Act*. These notes are industry specific and the fire service has many to contend with. It is recommended that in the revisions and development of SOGs, the Section 21 Guidance Notes be referenced. In the absence of a local SOG, that is either the same or more restrictive in the area of safety, the Guidance Notes should be the guiding documents.

6.3 Record Keeping & Information Management

MDFD has a Records Management System (RMS) called Fire Pro. Fire Pro, developed by Ingenious Software, based in British Columbia, has been set up for Ontario reporting. The Fire Pro 2 software is a robust RMS that can track all activities conducted by the Fire Department. While there may be a preference to complete some reports on paper, there are reports that would be better placed into Fire Pro by an officer (e.g. maintenance deficiency). Fire Pro can receive, track, notify, and close off deficiency reports. As with any database and RMS, the backend of the system must first be established which requires considerable work to be done properly. This will take time and effort by the Chief and Administrative Support. As staff, including firefighters, become more familiar with Fire Pro, the reliance on paper copies of reports could be reduced in favour of direct filing online into Fire Pro.

It is recommended that SOGs be developed that provide guidance to all firefighters on what reports are to be completed on paper or electronically, and how to complete these forms.

It is also recommended that ITFD provide the Municipality with all dispatch and call reports for

incidents within the jurisdiction so that they can be entered into the RMS.

6.4 Customer Service, Media, & Public Relations

As a fire department providing service, Customer Service is an important aspect of public interaction. A maxim “how can I help you” can be asked of someone stopping by the station on a summer evening as well as someone who has called 9-1-1 because they are having the worst day of their life. It is recommended that all firefighters receive customer service training that can help them relate to the citizens they serve.

As noted in *Section 3: Fire Prevention*, as well as what is denoted in the Three Lines of Defence, public education is essential. One area where this education tends to find its mark is providing information to the public on fire events. It is recommended that when a fire event occurs within the Municipality, media releases are provided through various platforms that explain the situation as well as how others can avoid the same at their own home. It is also recommended that those deemed responsible for providing these messages (typically the Fire Prevention Officer) receive appropriate training so that correct messaging can be given. An SOG should be developed outlining where the responsibility lies in providing informational releases.

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
34	It is recommended that the Fire Chiefs review and update all Standard Operating Procedures (SOGs) and that all SOGs are reviewed and updated, as applicable, every three years.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review
35	It is recommended that additional fire department administrative support hours be allocated to increase from 3.5 hours per week to 15 - 21.5 hours per week and that the workload be monitored.	\$12,000 - \$18,000	

36	It is recommended that a committee be struck involving firefighters and officers from both fire departments to guarantee that Standard Operating Procedures related to fire ground operations and any dual response calls within the Municipality are compatible ensuring integrated operations. This process should be directed by the Fire Chiefs with the final version provided to the Chief Administrative Officer.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review
37	It is recommended to reference Section 21 Guidance Notes in the revisions and development of Standard Operating Guidelines.		
38	It is recommended that all firefighters receive customer service training that can help them relate to the customers they serve.		
39	It is recommended that when a fire event occurs within the Municipality, media releases are provided through various platforms that explain the situation as well as how others can avoid the same event at their own home. To assist in this process, a Standard Operating Guideline should be developed outlining where the responsibility lies in providing informational releases, and that appropriate training be given to those responsible.		

SECTION 7: Human Resources

- 7.1 Fire Department Staffing Levels
- 7.2 Firefighter Recruitment & Retention
- 7.3 Job Descriptions
- 7.4 Promotional Policy
- 7.5 Succession Planning
- 7.6 Health & Safety

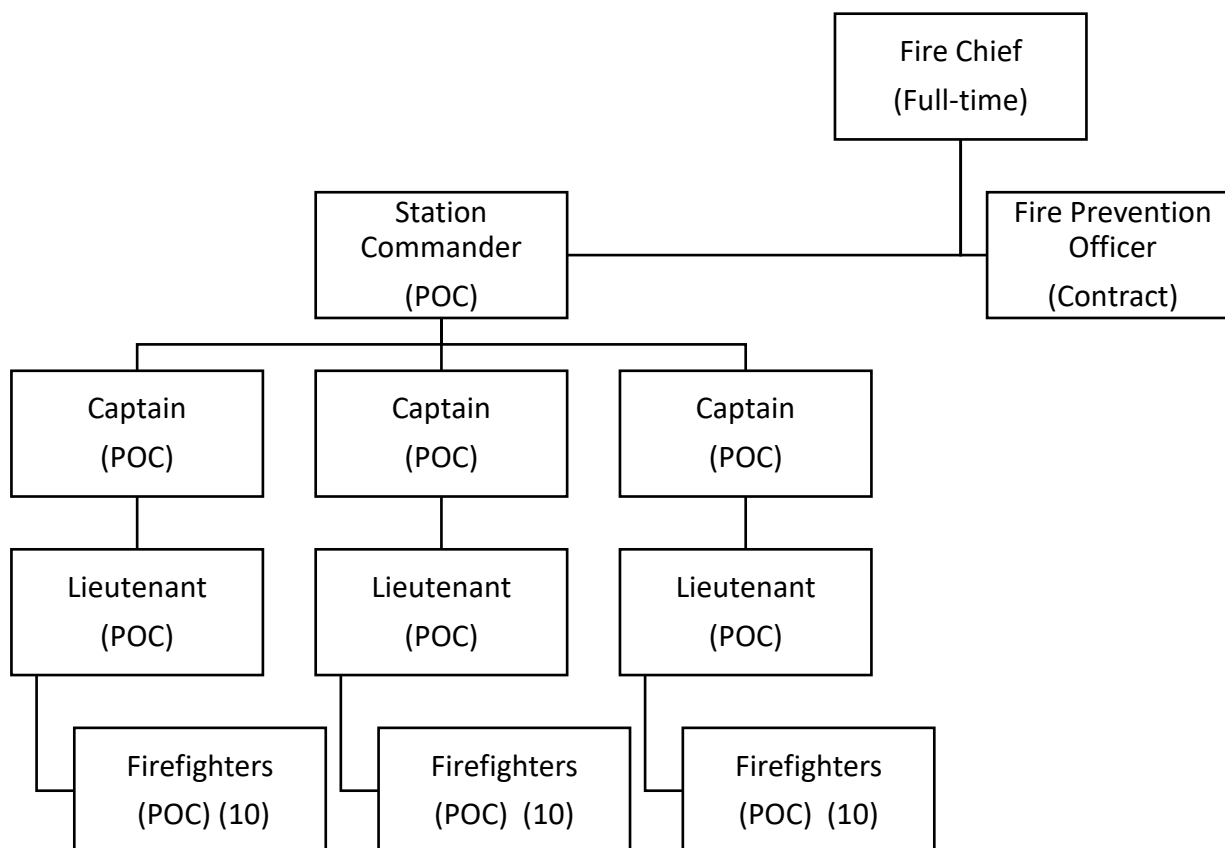
Section 7: Human Resources

7.1 Fire Department Staffing Levels (including full-time positions and paid-on-call firefighters)

The MDFD currently uses a three-platoon system. The platoons allow for a direct line of responsibility for the firefighters up through an assigned Lieutenant and Captain and provides a level of accountability for training, equipment maintenance, etc. The number of platoons is flexible and primarily driven by the number of officers and direct supervision. For example, four platoons would require four captains, four lieutenants, etc.

Note: “POC” stands for “Paid On-Call”, which is a term used for volunteer firefighters as they are no longer true volunteers but are on-call and paid for time committed to the fire department (e.g. training, responses).

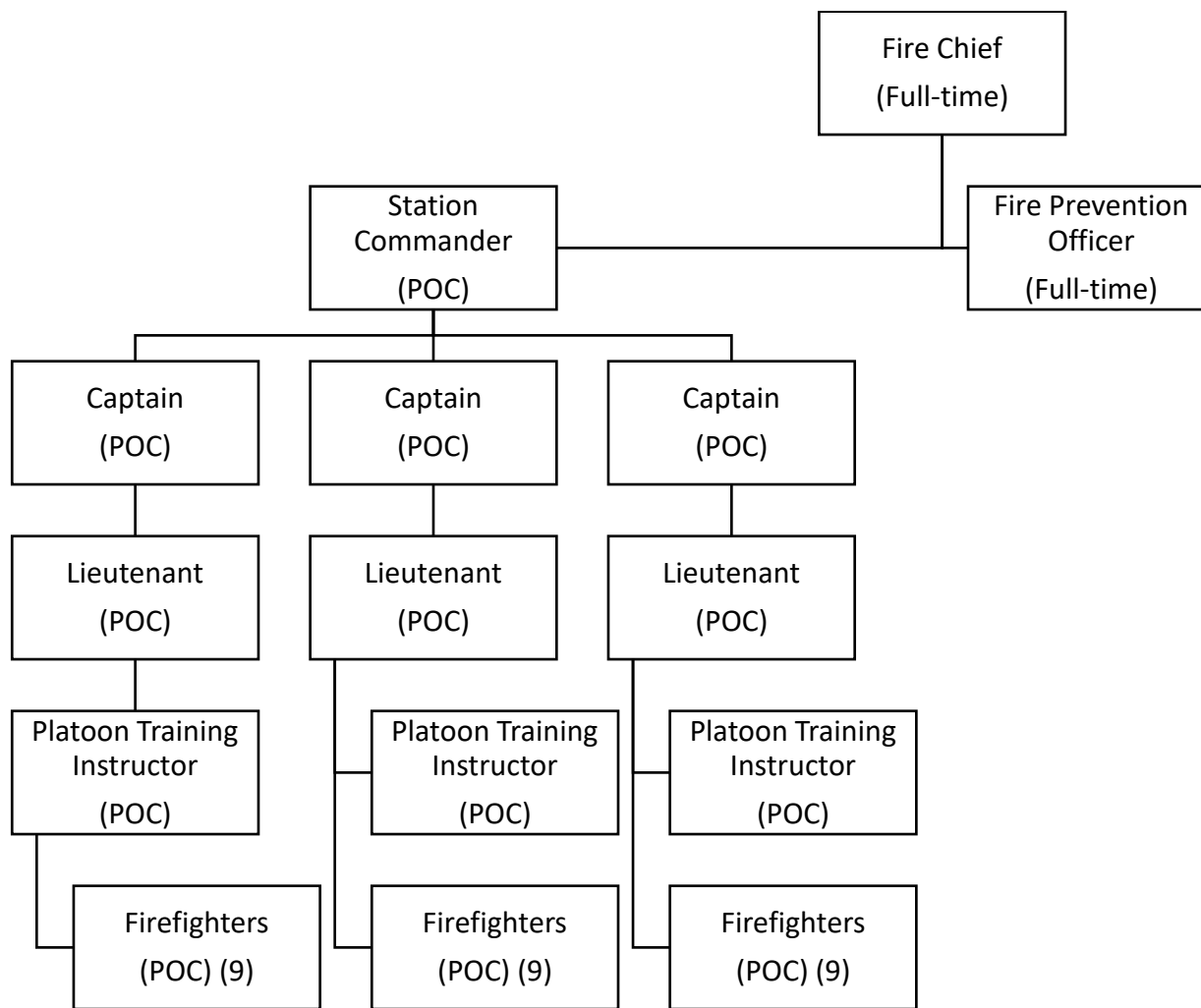
FIGURE 7.1: MDFD Organizational Chart (current)



The current model has been reduced since 2016 with the elimination of the Deputy Chief position and the reduction of the full-time Administrative Assistant position to 10% of an FTE. In

addition, there was a .4 FTE for Fire Prevention. Currently, there is a contract Fire Prevention Officer without any guarantee for the position in the future. The current model has 38 approved positions with the Fire Prevention Officer also being a firefighter.

FIGURE 7.2: Fire Department Organizational Chart (Amended)



The Amended Chart provides for a full-time Fire Prevention Officer and adds a Platoon Training Instructor to each platoon. The Training Instructors become responsible for planning, overseeing, and tracking firefighter training.

The number of firefighters must be monitored to ensure that an adequate number are available to respond to calls. If, on a regular basis, the number of firefighters responding to an emergency does not meet the needs of the incident, then consideration should be given to increasing the complement of firefighters. In addition, firefighters who are available during weekday dayshifts (e.g. night shift workers) should be actively recruited to ensure adequate response during the dayshifts.

7.2 Firefighter Recruitment & Retention

There are many successful Recruitment and Retention Programs that can be modeled in the Municipality. One example that was produced by the OFMEM is contained in Appendix A of this document: *PFSG 04-84-13 – Recruitment and Retention of Volunteer Firefighters*.

Some tools relate to enhancing training and special projects for the staff to become more involved. These could include such things as:

- Long service awards in the form of remuneration or a stipend
- Education assistance programs to support them in their professional development
- Increased training opportunities

These concepts are great but have limited effect if the community is not offering the desired employment or education needs of the firefighters. Continued messaging is essential from the Fire Department to the community to keep the organization in the minds of those being served and may aid in drawing candidates during recruit drives.

For those firefighters wishing to advance, a mentorship program could be initiated based on a positive performance management philosophy. The initiative is to encourage firefighters to strive to achieve their goals that are set with their supervisor at the beginning of a cycle. These goals should be focused around training needs and responsibilities. At the conclusion of the cycle, and the planning of the next cycle, the goals set at the beginning are reviewed. Those goals that were not attained should be assessed for completeness. Those incomplete areas are analyzed to determine what the roadblocks were, and plans are then made to work around the issues. This continued program will see the entire Fire Department improve over time.

7.3 Job Descriptions

Defined job descriptions for each position within the Fire Department are necessary. These job descriptions should outline what knowledge, training, and experience is required for each level. Some of the responsibilities and certifications for each position are listed below, the majority of which represent the NFPA professional qualifications for the stated standards. This is not meant to be an exhaustive list.

Fire Chief

Responsibilities:

- Leadership and Management of the Fire Department
- Responsible to Council for Fire Protection matters (as per the FPPA)
- Responsible to the CAO for daily management of the Fire Department.
- Responsible for actions as the Chief Fire Official/Fire Chief as outlined in the *Fire Protection and Prevention Act* and the Fire Code
- Emergency Management – Community Emergency Management Coordinator.

Certifications:

- Fire Service Officer 4
- Fire Service Inspector 2
- Fire Service Instructor 2
- Public Fire Life Safety Educator 2
- JHSC certified with sector specific training
- Fire Investigator

Deputy Chief/Station Commander

Responsibilities:

- Work with the Fire Chief to accomplish strategic goals and objectives
- Manage and lead station personnel
- Ensure reporting is completed

Certifications:

- Fire Service Officer 3
- Fire Service Inspector 1
- Fire Service Instructor 2
- Public Fire Life Safety Educator 2
- JHSC certified with sector specific training

Captain

Responsibilities:

- Ensure firefighters are complying with the *OH&S Act*
- Be a leader and mentor to the firefighters assigned
- Ensure appropriate records are completed

Certifications:

- Fire Services Officer 2
- Fire Service Instructor 2
- Public Fire Life Safety Educator 1
- Fire Service Inspector 1

Lieutenant

Responsibilities:

- Ensure firefighters are complying with the *OH&S Act*
- Be a mentor to those in their platoon
- Ensure reporting is completed of assigned tasks

Certifications:

- Firefighter 2
- Hazmat Operations
- Fire Service Officer 1
- Fire Service Instructor 1

Training Instructor

Responsibilities:

- Ensure firefighters are complying with the OH&S Act
- Be a mentor to those in their platoon
- Provide firefighter training

Certifications:

- Firefighter 2
- Hazmat Operations
- Fire Service Officer 1
- Fire Service Instructor 2

Firefighter

Responsibilities:

- At the task level, follow direction given from supervisors
- Ensure the appropriate Personal Protective Equipment is properly worn for the appropriate activities

Certifications:

- Firefighter 2
- Hazmat Operations
- Pump Operator

Recruit Firefighter

Responsibilities

- Learn to become a firefighter

Certifications:

- Firefighter Level 2
- Hazmat Operations

While the listed certifications are noted for each level in the Chain of Command, it should not stop a keen individual from achieving levels of training higher than their current rank, prior to the expected time of promotion. Additional training makes for a better firefighter and officer.

7.4 Promotional Policy

As outlined in *Section 1: Governance*, the *Occupational Health and Safety Act*, Section 25 (2) (c), prescribes that when a supervisor is promoted, this person should be a competent person. A competent person is defined as someone who:

- is qualified because of knowledge, training and experience to organize the work and its performance;
- is familiar with this *Act* and the regulations that apply to the work and has knowledge of any potential or actual danger to health or safety in the workplace.

Based off the requirements of the *OH&S Act* outlined above, any promotions that occur, including “acting” positions, within the Fire Department must be done in accordance with this, and other, legislative needs. Along with the revised, or developed, job descriptions and a SOG that outlines the promotional process, an incumbent could readily prepare for advancement. It is recommended that the promotional process, once defined and developed, should be vetted by a Human Resources Specialist or the Municipal Solicitor, to ensure compliance with the legal requirements and the processes already established in the Municipality.

For a firefighter to prepare for the promotional process, the job descriptions should provide guidance as to the prerequisite training for each level. A concept within the job descriptions should be that they are aligned with the prerequisite training as outlined in the NFPA Professional Qualifications Standards. There should be a clear path outlined from the Recruit Firefighter to the Fire Chief.

7.5 Succession Planning

Section 7.2 Firefighter Recruitment & Retention describes a mentorship program. The benefits of a mentorship program enable the individual to determine if they are suited to their position and provide the Fire Chief with an understanding of whether the person is the correct fit for the role. Additionally, a positive Performance Management Program, as outlined in *Section 7.2 Firefighter Recruitment & Retention*, will drive individuals to continued success. Continual dialogue with staff will provide the Fire Chief and other supervisors an understanding of who is interested in promotion. While there are some who would like to promote, not all persons are suited for the role. Appropriate interviews, testing, and personnel records review is essential to ensure the correct person is promoted.

7.6 Health & Safety

In *Section 1.4 Joint Health & Safety Committee*, the safety conscious culture of the fire service is discussed. The municipal firefighters are commended for their safety record. Further to the recommendations outlined for the JHSC, all staff should receive training on Health and Safety on an ongoing basis. Below are links to two online programs that are required for all staff to

complete. The certificates of completion should be kept in personnel files. It is recommended that all worker members complete the Worker Health and Safety Awareness in 4 Steps Program and all supervisors complete the Supervisor Health and Safety Awareness in 5 Steps Program.

Worker Health and Safety Awareness in 4 Steps

<https://www.labour.gov.on.ca/english/hs/training/workers.php>

Supervisor Health and Safety Awareness in 5 Steps

<https://www.labour.gov.on.ca/english/hs/training/supervisors.php>

(Completed by all MDFD firefighters).

Over the last number of years, the Provincial Government has provided Presumptive Legislation for various illnesses. What this means is that if a firefighter acquires certain ailments, those ailments are considered a workplace injury or illness.

There are certain cancers that fall into the Presumptive Legislation. The presumption dates back 60 years for certain cancers and more cancer types are coming online as time passes. The WSIB website maintains the most up-to-date information - www.wsib.on.ca.

There are also criteria around the claiming for cardiac events in firefighters. See the WSIB website for the most up-to-date information.

In 2016, the Provincial Government recognized Post-Traumatic Stress Disorders for certain groups, including firefighters, as a workplace injury. The WSIB website maintains the most up-to-date information - www.wsib.on.ca.

As these presumptions were provided, the Government has asked fire services to demonstrate what they are doing to prevent these illnesses from occurring. There are programs that outline processes to ensuring bunker gear is properly handled to prevent cancers. There are exercise and nutrition practices that help to prevent cardiac events. Each service listed as providing the legislative coverage for PTSD was to provide a PTSD Prevention Plan.

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
40	It is recommended that the Fire Department management (for both departments), under the direction of the Chief Administrative Officer, should update job descriptions for each of the approved positions within the Establishing By-law. These job descriptions should include the required knowledge, training certifications, and experience to be compliant with the <i>Occupational Health and Safety Act</i> .	No identified costs other than staff time	Short-term (1 – 3 years) and ongoing
41	It is recommended that the Fire Department management (for both departments) produce a Standard Operational Guideline (SOG) that outlines the promotional processes within the Fire Department. These processes must consider the required NFPA standards based on the various positions within the Fire Department. This SOG should include supervision of the process by the Chief Administrative Officer to ensure compliance with legislative requirements under the <i>Employment Standards Act</i> .		
42	The promotional process, once defined and developed, should be vetted by a Human Resources Specialist or the Municipal Solicitor, to ensure compliance with the legal requirements and the processes already established in the Municipality.	Staff time plus costs of legal review	
43	It is recommended that all worker members complete the Worker Health and Safety Awareness in 4 Steps Program and all supervisors complete the Supervisor Health and Safety Awareness in 5 Steps Program.	No identified costs other than staff time	

SECTION 8: Facility

8.1 Fire Station Overview

Section 8: Facilities

8.1 Fire Station Overview

The Municipality owns and operates one fire station located at 81 Stewart St. This 790 sq. metre station was opened in 2009 and includes a six-bay drive-through apparatus floor, five offices, kitchen, meeting room, and training room. The station has been well designed and will serve the community well for the next 20 plus years.



As part of a cancer prevention strategy, the firefighters should be encouraged to shower after fighting a fire and before leaving the station. To this end, there are showers located in the washrooms.

The firefighter's bunker gear is stored on the apparatus floor, which exposes the gear to exhaust and ultra violet light contaminants, eventually degrading the efficiency of the equipment and reducing its life span. The storage of the bunker gear in this manner also exposes the general area to contaminants obtained from fire responses (and others).



New station design incorporates a storage room that is properly ventilated whereby bunker gear can be laundered, dried, and returned to service limiting the exposure to the other areas of the fire station. It is recommended that consideration be given to providing a room that would be properly ventilated for the storage and laundering of bunker gear.

During the walk-through and review of the fire station, there was only one concern noted – the

lack of exhaust fume ventilation units. From a health and safety perspective, the Fire Service should install either an at source exhaust evacuation system or a ceiling system engineered to reduce the diesel particulates in the fire station.

The following two photos identify the two exhaust system types. The first (with the red truck) is an “at source” system. The second (with the white trucks) is a ceiling mounted system. Costing for such systems can vary greatly due to the size of the fire station and number of vehicles housed in the bay area. In general, a fire department should expect to pay between \$10,000 to \$40,000 for these types of systems.



The station does have an emergency power generator. The generator receives service on a regular basis in accordance with the current CSA standard, CSA C282 - Emergency Electrical Power Supply for Buildings.



Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
44	It is recommended that consideration be given to installing either an at source exhaust evacuation system or a ceiling system engineered to reduce the diesel particulates in the fire station.	\$50,000 - \$175,000 depending on the type of system installed	Short-term (1 – 3 years)

SECTION 9: Apparatus and Equipment

9.1 Fire Apparatus – Replacement Schedules

Section 9: Apparatus and Equipment

9.1 Fire Apparatus – Replacement Schedules

When assessing a fire department's ability to respond and meet the needs of the community, the Fire Underwriters Survey considers the age of a fire truck as one of its guidelines.

Pumpers, aerials, and tankers should be on a 20-year replacement cycle which keeps them within the Fire Underwriters Survey recommendations and more importantly creates a standard when it comes to forecasting fire truck replacements.

The following information provides the best practice for vehicle replacement. The cost of ownership compared to the depreciated value should be tracked. Once a vehicle begins costing more than it is worth, replacement should be considered. If the cost of ownership of a vehicle is high, this indicates that the vehicle has become unreliable. Having an emergency vehicle that is unreliable could place the Municipality in a liability position.

Fire Underwriters Survey – Vehicle Replacement Recommendations

The Fire Underwriters Survey is reviewed by insurance companies. Provided that the Fire Department adheres to the recommended replacement timelines through an approved capital replacement schedule, the Department will retain its fire rating for vehicle replacement.

In the following sections, it is noted that there is certain certification necessary for pumpers, aerials, and tankers. The Fire Underwriters Survey denotes a lifecycle for these types of vehicles. Small trucks, being ½ tons, and Rescue Apparatus are not considered in the certification process.

The Medium Sized Cities section (outlined in blue) is the recommendation for vehicle replacement for a municipality the size of Meaford. This allows for up to a 20-year replacement cycle, in which the fire vehicle can be utilized as Second Line response status.

Apparatus Age	Major Cities ³	Medium Sized Cities ⁴ or Communities Where Risk is Significant	Small Communities ⁵ and Rural Centres
0 – 15 Years	First Line	First Line	First Line
16 – 20 Years	Reserve	Second Line	First Line
20 – 25 Years ¹	No Credit in Grading	No Credit in Grading or Reserve ²	No Credit in Grading or Reserve ²
26 – 29 Years ¹	No Credit in Grading	No Credit in Grading Or Reserve ²	No Credit in Grading Or Reserve ²
30 Years ¹	No Credit in Grading	No Credit in Grading	No Credit in Grading
1. All listed fire apparatus 20 years of age and older are required to be service tested by a recognized testing agency on an annual basis to be eligible for grading recognition (National Fire Protection Association 1071) 2. Exceptions to age status may be considered in small to medium sized communities and rural centre conditionally, when apparatus condition is acceptable, and apparatus successfully passes required testing 3. Major cities are defined as an incorporated or unincorporated community that has: - a populated area (or multiple areas) with a density of at least 400 people per square kilometre; AND - a total population of 100,000 or greater. 4. Medium Communities are defined as an incorporated or unincorporated community that has: - a populated area (or multiple areas) with a density of at least 200 people per square kilometre; AND - a total population of 1,000 or greater. 5. Small Communities are defined as an incorporated or unincorporated community that has: - no populated areas with densities that exceed 200 people per square kilometre; AND - does not have a total population in excess of 1,000. Fire Underwriters Survey definition of 1st line, 2nd line and Reserve is: 1st line is the first fire truck utilized for response at the fire station 2nd line is the next truck to be used if the 1st line unit is tied up at a call, and Reserve is the vehicle kept in the fleet to be put into service if a 1st line or 2nd line vehicle is out of service.			

By ensuring that the vehicles are being replaced on a regular schedule, the Municipality is also

demonstrating due diligence towards ensuring a dependable response fleet for the Fire Department and the community it serves. This in turn may help keep the community's fire rating in good stance, which can also reflect on commercial and residential insurance rates.

The National Fire Protection Association 1911, *Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus* also supports a regular replacement schedule of fire vehicles. This standard includes guidance on retirement criteria for fire apparatus. National Fire Protection Association 1911 recommends that all front-run vehicles are replaced on a 15 to 20-year cycle, depending on the community size.

For fire departments that are considering refurbishing their vehicles to extend the in-service life, there is the National Fire Protection Association (NFPA) 1912, *Standard for Apparatus Refurbishing*. Although the FUS do take refurbishment of vehicles into consideration, no credit rating is assigned to vehicles over 30 years of age.

The Meaford and District Fire Department is well-equipped with pumper trucks, a tanker, a rescue, and an aerial (which also functions as a pumper).

- 1992 Ladder truck – Pierce 75" Telesquirt with a 5000 lpm pump
- 2007 Tanker – Freightliner Tanker with a 1650 lpm pump
- 2009 Rescue – Chevrolet Tahoe with rescue body
- 2011 Pumper/Tanker – International Tanker with a 5000 lpm pump
- 2014 Pumper – Spartan Pumper with a 5000 lpm pump
- Command – 2011 Ford F150 pickup

This fleet will permit the fire department to address most fire calls that will occur within the community. Two tankers are utilized to provide an initial water supply in areas without a hydrant, and this is addressed with the Tanker and Pumper/Tanker.

The Inter-Township Fire Department is also well-equipped with pumper trucks, tankers, and a rescue truck. It also has an ATV with a trailer for transport, and an air truck that serves the county.

During the station and equipment review, it was noted that the vehicles and small engines (pumps, generators, etc.) are on a standard replacement cycle and that maintenance and repair work is addressed as quickly as possible by the fire departments or other recommended facilities. The Fire Chief advised that annual pump, aerial, hose and ladder testing had started since his arrival.

Ladder trucks play a vital role on the scene of a structure fire; securing building access for upper floors, rescue, assisting with rooftop ventilation, and suppression can be achieved from an aerial ladder. These factors are especially important when dealing with apartment buildings of 2 storeys or more, commercial blocks (such as downtown Meaford), and industrial facilities. As the MDFD aerial, a 1992 Pierce Telesquirt with a 75' ladder, reaches the end of its life span, the Municipality should start to budget for a replacement no later than 2020 and order it by 2019. Aerial apparatus are expensive but are a valuable tool when called up.



Considering the fire risk of the downtown core and as the community grows (there are planned multi-tenant occupancies of 3 to 5 storeys), the ladder truck becomes a critical tool for the Fire Department. Options to reduce the cost include purchasing a multipurpose pumper truck with aerial capabilities (such as a tele-squirt or quint), a demonstrator truck, a used truck (as was done with the current truck), or a standard built truck (as opposed to a custom designed truck).

A further option is to investigate the option of a fire service agreement for the use of neighbouring municipality's aerial apparatus – but caution is to be used as there is no guarantee that the units will be available when needed. The two options for a fire service agreement to provide an aerial truck include Owen Sound and Blue Mountains. A potential challenge with the City of Owen Sound is that they currently only staff one fire truck per shift which would be required to stay within the city for fire protection. Therefore, a call for their aerial truck would require a call back crew to be called in to man the truck and then respond from Owen Sound, creating an extended response time if the city was willing to establish such an agreement. A potential challenge with Blue Mountains is that they have been unwilling to establish a formal fire service agreement for the eastern portion of Meaford to have the closest fire truck respond, therefore, they may not be willing to develop other fire service agreements. If an agreement was established, the aerial would be staffed by a callback crew that would have to be called in before responding creating an extended response time.

An additional support vehicle would be required to ensure the Fire Prevention Officer has a vehicle to conduct the FPO responsibilities.

While the standards speak to larger apparatus, they do not cover light-duty vehicles like cars, pick-up trucks, and SUVs. Various municipalities have policies that generally range from 60 months to 84 months for light emergency vehicles. In general, these policies place the current Chief's vehicle at the far end of its life cycle for emergency services. Mileage, maintenance, and repair costs must always be factored in – it may be more economical to replace a vehicle requiring extensive repairs. The Chief's vehicle is currently at 7 years old and replacement should be planned for in the near future. Alternatively, the pick-up could be used primarily for non-emergency purposes such as Fire Prevention. Therefore, we are recommending the purchase of a new vehicle for the Fire Chief and utilizing the current vehicle for Fire Prevention. We have indicated a replacement of this vehicle in 2021 in the chart below giving the truck 10 years of service, allowing for three more years in a primarily non-emergency capacity. Some municipalities transfer older light vehicles from the fire department to other non-critical areas such as Parks or Administration to further extend their use.



It is recommended that funds be made available for the safety features on the fire apparatus including ensuring all apparatus have chevrons on the rear and that blue emergency lighting be added. Both features increase the visibility of the apparatus and reduce the risk of vehicles crashing into stopped fire trucks.

The following is the list of MDFD apparatus with a recommended replacement schedule.

UNIT	YEAR	MAKE / MODEL	Recommended Replacement Schedule
Ladder	1992	PIERCE 75' TELE SQUIRT	2020
Tanker	2007	FREIGHTLINER TANKER	2027
Rescue	2009	CHEVROLET TAHOE	2029
Command	2011	FORD F150 SUPER CAB PICKUP	2021
Pumper/Tanker	2011	INTERNATIONAL TANKER	2031
Pumper	2014	SPARTAN PUMPER	2034

The following is the list of ITFD apparatus with a recommended replacement schedule.

UNIT	YEAR	MAKE / MODEL	Recommended Replacement Schedule
Pumper Tanker	2014	Freightliner FM2	2034
Pumper	2009	Freightliner M2	2029
Tanker	1994	Freightliner FL80	2019
Pumper Tanker	2004	Freightliner FL80	2024
Pumper Tanker	1993	Freightliner FL80 (used only as tanker)	2018
Rescue	2017	Freightliner FM2	2037
Command	2017	GMC pick up	2027
Utility	2012	Ford F550 4 Wheel drive	2032
Trailer		Haulmark - utility trailer for ATV	
RTV		Kubota all terrain vehicle	

ITFD also has a light / air truck that is a county-wide resource and was donated by the Bruce Power.

The question has been asked what apparatus would be required to provide fire protection by ITFD to the western portion of the Municipality. If there is an automatic two station response to structure fires, having the ITFD provided a pumper and a tanker, or a pumper and rescue truck to vehicle collisions would be enough for most calls.

Recommendation(s)

Rec #	Recommendation	Estimated Costs	Suggested Timeline
45	Budget for the replacement of the aerial truck no later than 2020 with ordering to take place in 2019. Although the truck exceeds its 20-year recommended frontline role, it is reported to be in good condition and regularly maintained to ensure its safe and reliable function. Therefore, to give the Municipality additional time to fund the truck, we have recommended replacement in 2020, if it remains safe and operational. An option is to investigate the possibility of a fire service agreement for the use of neighbouring municipality's aerial apparatus – but caution is to be used as there is no guarantee that the units will be available when needed and will have a delayed response.	An aerial truck will be approximately \$1,000,000. Previously owned trucks that are 12-15 years old may be purchased for \$100,000-\$250,000	An aerial truck should be ordered in 2019 with delivery planned for 2020.
46	It is recommended that funds be made available for the safety features on the fire apparatus including ensuring all apparatus have chevrons on the rear and that blue emergency lighting be added.	\$20,000 - \$25,000	Short-term (1 – 3 years)
47	Replace the current command pick-up truck and utilize the current vehicle in a primarily non-emergency capacity for the Fire Prevention Officer to conduct the FPO responsibilities.	\$75,000	2019

SECTION 10: Summary of Recommendations

10.1 Recommendations & Estimated Costs

Section 10: Summary of Recommendations

10.1 Recommendations & Estimated Costs

The following chart provides a further overview of the recommendations found throughout this report along with any estimated costs and suggested timelines for implementation. This Master Plan document is a culmination of 47 recommendations.

Rec #	Recommendation	Estimated Costs	Suggested Timeline
1	It is recommended that the Establishing and Regulating By-law be reviewed before Council at the beginning of each term. This will allow the Chief Administrative Officer and Fire Chief to keep abreast of change and allow Council members to be familiar with the scope and practice of the Fire Department. Newly drafted by-laws should be vetted by Municipal Solicitor, the Municipal Insurer, and a Program Specialist with the Office of the Fire Marshal and Emergency Management.	Staff time plus costs of legal review	Mid-term (4 – 7 years) and with every new council
2	It is recommended that the current Joint Health and Safety Committees review the <i>Occupational Health and Safety Act</i> , its Regulations, and Section 21 Guidance Notes to ensure the committees and their functions are compliant with the required training and processes. This review should be conducted on at least an annual basis, or as required due to changes and additions to the Fire Department's operations.		Short-term (1 – 3 years) and ongoing
3	It is recommended that a review be undertaken of incident response procedures (automatic dual station responses), response boundaries (closest station), and response activities to improve response performance and target the response time objectives as outlined in National Fire Protection Association (NFPA) 1720.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review, where applicable

4	It is recommended that a fire protection agreement be entered with the Chatsworth Fire Department, similar in design and cost recovery to the Grey Highlands Agreement, to provide initial response to a realigned boundary for the southwest area of the Municipality where Chatsworth is closer than ITFD.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review, where applicable
5	It is recommended that the Municipality establish a Fire Station in the western portion of the Municipality. A pumper / tanker and a light rescue truck should be placed at the new station.	A new station may range from \$800,000 - \$1,600,000 dependant on the type of construction	Start the process short-term (1 – 3 years) for operations mid-term (4 – 6 years)
		\$250,000 be budgeted for training and initial capital equipment	Mid-term (4 – 6 years)
		A pumper/tanker is estimated at \$650,000, and a light rescue estimated at \$150,000. The cost should be offset by either moving an ITFD truck over or the funds that would be owed to the Municipality by ITFD.	
6	The Municipality, along with the Township of Georgian Bluffs, should have an independent firm conduct a thorough review and Master Planning Process for the Inter-Township Fire Department.	\$45 - 50,000 shared between the two municipalities	Short-term (1 – 3 years)

7	The dispatch protocols (e.g. closest station for response boundaries and stipulate automatic dual station calls for structure fires, etc.) for the Municipality should be reviewed and closely monitored for compliance.	No identified costs other than staff time	Short-term (1 – 3 years)
8	Any updates or renewals to aid agreements should be vetted by the Ontario Fire Marshal's Office and Emergency Management Specialist and the Municipal Solicitor.	Staff time plus costs of legal review	Short-term (1 – 3 years)
9	It is recommended that the incident reporting be outlined in a policy for both fire departments so that the reporting meets the intent of the Ontario Fire Marshal's Office and Emergency Management directions.	No identified costs other than staff time	Short-term (1 – 3 years)
10	It is recommended that the dispatch agreement be amended to include appropriate standards such as call taking and dispatching times under NFPA - 1221 – Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, and training requirements of the dispatcher to meet NFPA 1061 - Professional Qualifications for Public Safety Telecommunications Personnel.		
11	It is recommended that the Dispatch Agreement contain provision for the service provider to supply incident reports that outline the required data as noted in the Ontario Fire Marshal's Office and Emergency Management reporting requirements at the conclusion of each event.		

12	A single fire prevention/education program should be established for the entire Municipality to ensure consistency in a standard format. Conduct a comprehensive review and revision of the fire prevention policies and procedures to update existing practices and, where necessary, implement additional policies and/or procedures to assist staff in prioritizing work, sustain certification, and to ensure all programs and activities are delivered to customers in a consistent manner.		
13	It is recommended that a single Simplified Risk Assessment/Community Risk Assessment be developed for the entire Municipality and that the Simplified Risk Assessment/Community Risk Assessment review be conducted every four (4) years, along with the Establishing By-law. The presentation of both documents to the newly sitting council, at the beginning of the council term, will allow the members to understand the scope of the Fire Department and the financial needs to sustain it. Upon completion of an updated Simplified Risk Assessment/Community Risk Assessment, the fire department should adjust the prevention and education programs, as required, to respond to the findings of the assessment, and the Fire Chief should recommend to Council the most appropriate Fire Prevention and Inspection Policy.	No identified costs other than staff time	Short-term (1 – 3 years)
14	It is recommended that a Fire Inspector(s) for the Municipality of Meaford be certified to the National Fire Protection Association (NFPA) 1031 (Level 1 minimum) with the Ontario specific training and appropriate training to deal with Vulnerable Occupancies. It is recommended that a formal delegation of power be presented to the Fire Inspector in accordance with the Fire Protection and Prevention Act (FPPA) 6(6), if the Fire Inspector is not the Fire Chief.		

15	All non-single-family residential building stock within the Municipality of Meaford should be assessed with the IRM tool, and that the Fire Chief(s) uses the data from the IRM to make changes to the Fire Prevention and Inspection Policy for Council to consider.	No associated costs beyond staff time	Short-term (1 – 3 years)
16	It is recommended that the Meaford and District Fire Department and Inter-Township Fire Department move towards the training and certification of its Fire Officers in the areas of fire prevention and public education trained and certified to at least: NFPA 1031 – Fire Inspector I and NFPA 1035 – Fire and Life Safety Educator I.	Training of Fire Officers to NFPA 1031 – Fire Inspector I, and NFPA 1035 – Fire and Life Safety Educator I can be done in-house requiring staff time	Short-term (1 – 3 years)
17	It is recommended that the fire department utilize the records management system program to implement a process to track all prevention and education activities across the Municipality. This should include core programs such as the Home Smoke Alarm Program, distribution of fire safety education materials, and inspections.	No identified costs other than staff time	
18	Those conducting Fire Safety Inspections and issuing Fire Inspection Orders within the Municipality of Meaford should receive the training necessary as provided by the Ontario Fire College. Note: ITFD is not using the Fire Inspection Orders format and should move to the new standard.	Training costs for the Fire Prevention Officer/Inspector will be based on the qualifications and experience of the person hired to fill this position	

19	It is recommended that the Municipality hire a full-time Fire Prevention Officer/Inspector with responsibility for the Fire Prevention Program for the entire Municipality. This person will be responsible for the updating of the Simplified Risk Assessment/Community Risk Assessment, implementing the Integrated Risk Management program, conducting inspections, fire code enforcement, fire investigations, coordinating public education programs, etc. across the Municipality.	Hiring a Fire Prevention Officer/Inspector - \$75,000 plus benefits	Short-term (1 – 3 years)
20	Municipality of Meaford Fire Department(s) should investigate Home Fire Sprinkler Installation safety initiative as part of their fire prevention and public education initiatives, especially in the more rural areas and in residences designed for seniors.	No identified costs other than staff time	
21	It is recommended that a stronger website and social media presence be investigated that would aid in providing greater detail to the residents and visitors within the Municipality of Meaford.	No identified costs other than staff time	
22	It is recommended that a response boundary realignment occur between the Meaford & District Fire Department and Inter-Township Fire Department to ensure that the quickest response (usually closest station) is dispatched.	No identified costs other than staff time	
23	The practice of firefighters responding to fire calls and motor vehicle collisions in their personal vehicles should be eliminated as it creates significant health and safety risks to the firefighters and liabilities to the Municipality.	No associated costs	Short-term (1 – 3 years)
24	Both Fire Departments must develop Standard Operating Procedures, based off Section 21 Guidance Notes #6-10 for responding to motor vehicle collisions.	No identified costs other than staff time	Short-term (1 – 3 years)

25	The Meaford District Fire Department should undertake a Water Tanker Shuttle Accreditation process.	\$5,000 fee plus associated staff time	Long-term (7 – 10 years)
26	It is recommended that the Municipality investigate placing cisterns and dry hydrants in the rural areas of the community to provide an emergency water source.	A large water cistern \$10,000 - \$20,000 depending on the size of the tank and earthworks required for installation. Dry hydrants \$5,000 - \$10,000 depending on the work required to install the dry hydrant as well as ensuring the surface is suitable for fire trucks.	Mid to long-term (4 – 10 years)
27	It is recommended that the MDFD appoint Platoon Training Instructors for each Platoon and that the instructors be certified at a minimum as a Fire Service Instructor Level 1 (NFPA 1041).	Additional stipend for three Training Instructors may range from \$6-18,000	Short-term (1 – 3 years)
28	It is recommended that the fire departments focus on completing training to a certified level.	All training comes with the cost of hourly wages for those attending.	
29	It is recommended that for skills maintenance training, Job Performance Requirements become the focus in a scenario-based model for each firefighter level, up to and including their current rank and position and this documentation be kept on file.	There may be costs for training and expenses if the program is remote or contracted externally.	

30	It is recommended to verify in a more formal manner that the Training Program is meeting the related National Fire Protection Association program recommendations. The training staff should identify: a. What training programs are required in relation to the services that the Fire Departments are providing; b. The number of hours that are required to meet each of those training needs; c. Resources required to accomplish this training; d. Joint partnerships with bordering fire departments and private organizations/colleges that can be entered into to achieve the training requirements, and; e. An annual program outline at the start of each year to the Fire Chief, with noted goals and expectations, which are measured and reported on in relation to completion success rate at the end of each year.	No identified costs other than staff time	Short-term (1 – 3 years)
31	Develop Standard Operating Guidelines that outline the process to receive training along with training expectations and the requirement for detailed training records.		
32	It is recommended that all promotions into an officer level be consistent with the National Fire Protection Association (NFPA) standards and local Standard Operating Guidelines.		
33	It is recommended to keep detailed training records for both fire departments in a records management system.		

34	It is recommended that the Fire Chiefs review and update all Standard Operating Procedures (SOGs) and that all SOGs are reviewed and updated, as applicable, every three years.	No identified costs other than staff time	Short-term (1 – 3 years) with annual review
35	It is recommended that additional fire department administrative support hours be allocated to increase from 3.5 hours per week to 15 - 21.5 hours per week and that the workload be monitored.	\$12,000 - \$18,000	
36	It is recommended that a committee be struck involving firefighters and officers from both fire departments to guarantee that Standard Operating Procedures related to fire ground operations and any dual response calls within the Municipality are compatible ensuring integrated operations. This process should be directed by the Fire Chiefs with the final version provided to the Chief Administrative Officer.	No identified costs other than staff time	
37	It is recommended to reference Section 21 Guidance Notes in the revisions and development of Standard Operating Guidelines.		
38	It is recommended that all firefighters receive customer service training that can help them relate to the customers they serve.		
39	It is recommended that when a fire event occurs within the Municipality, media releases are provided through various platforms that explain the situation as well as how others can avoid the same event at their own home. To assist in this process, a Standard Operating Guideline should be developed outlining where the responsibility lies in providing informational releases, and that appropriate training be given to those responsible.		

40	It is recommended that the Fire Department management (for both departments), under the direction of the Chief Administrative Officer, should update job descriptions for each of the approved positions within the Establishing By-law. These job descriptions should include the required knowledge, training certifications, and experience to be compliant with the <i>Occupational Health and Safety Act</i> .		
41	It is recommended that the Fire Department management (for both departments) produce a Standard Operational Guideline (SOG) that outlines the promotional processes within the Fire Department. These processes must consider the required NFPA standards based on the various positions within the Fire Department. This SOG should include supervision of the process by the Chief Administrative Officer to ensure compliance with legislative requirements under the <i>Employment Standards Act</i> .	No identified costs other than staff time	Short-term (1 – 3 years) and ongoing
42	The promotional process, once defined and developed, should be vetted by a Human Resources Specialist or the Municipal Solicitor, to ensure compliance with the legal requirements and the processes already established in the Municipality.	Staff time plus costs of legal review	
43	It is recommended that all worker members complete the Worker Health and Safety Awareness in 4 Steps Program and all supervisors complete the Supervisor Health and Safety Awareness in 5 Steps Program.	No identified costs other than staff time	
44	It is recommended that consideration be given to installing either an at source exhaust evacuation system or a ceiling system engineered to reduce the diesel particulates in the fire station.	\$50,000 - \$175,000 depending on the type of system installed	Short-term (1 – 3 years)

45	Budget for the replacement of the aerial truck no later than 2020 with ordering to take place in 2019. Although the truck exceeds its 20-year recommended frontline role, it is reported to be in good condition and regularly maintained to ensure its safe and reliable function. Therefore, to give the Municipality additional time to fund the truck, we have recommended replacement in 2020, if it remains safe and operational. An option is to investigate the possibility of a fire service agreement for the use of neighbouring municipality's aerial apparatus – but caution is to be used as there is no guarantee that the units will be available when needed and will have a delayed response.	An aerial truck will be approximately \$1,000,000. Previously owned trucks that are 12-15 years old may be purchased for \$100,000-\$250,000.	An aerial truck should be ordered in 2019 with delivery planned for 2020.
46	It is recommended that funds be made available for the safety features on the fire apparatus including ensuring all apparatus have chevrons on the rear and that blue emergency lighting be added.	\$20,000 - \$25,000	Short-term (1 – 3 years)
47	Replace the current command pick up truck and utilize the current vehicle in a primarily non-emergency capacity for the Fire Prevention Officer to conduct the FPO responsibilities.	\$75,000	2019

SECTION 12: Appendices

Appendix A – Definitions and References

Automatic Aid Agreements – Fire Prevention and Protection Act, 1997 (FPPA 1997)

4. For the purposes of this Act, an automatic aid agreement means any agreement under which,
- a) a municipality agrees to ensure the provision of an initial response to fires, rescues and emergencies that may occur in a part of another municipality where a Fire Department in the municipality is capable of responding more quickly than any Fire Department situated in the other municipality; or
 - b) a municipality agrees to ensure the provision of a supplemental response to fires, rescues and emergencies that may occur in a part of another municipality where a Fire Department situated in the municipality is capable of providing the quickest supplemental response to fires, rescues and emergencies occurring in the part of the other municipality. 1997, c. 4, s. 1 (4).
 - *Automatic aid is generally considered in other jurisdictions as a program designed to provide and/or receive assistance from the closest available resource, irrespective of municipal boundaries, on a day-to-day basis.*

Commission of Fire Accreditation International Community Definitions:

- Suburban – an incorporated or unincorporated area with a total population of 10,000 to 29,999 and/or any area with a population density of 1,000 to 2,000 people per square mile
- Rural – an incorporated or unincorporated area with a total population of 10,000 people, or with a population density of less than 1,000 people per square mile.

National Fire Protection Association (NFPA) Documents:

- NFPA 1201 - Standard for Providing Fire and Emergency Services to the Public
- NFPA 1500 – Standard on Fire Department Occupational Safety and Health Program, 2013 editions
- NFPA 1720 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments.

Municipal Responsibilities (FPPA 1997)

2. (1) Every municipality shall,
- a) establish a program in the municipality which must include public education with respect to Fire safety and certain components of Fire prevention; and
 - b) provide such other Fire protection services as it determines may be necessary in accordance with its needs and circumstances.

Mutual Aid

- a) Mutual aid plans allow a participating Fire Department to request assistance from a neighbouring Fire Department authorized to participate in a plan approved by the Fire Marshal.
- b) Mutual aid is not immediately available for areas that receive fire protection under an agreement. The municipality purchasing fire protection is responsible for arranging an acceptable response for back-up fire protection services. In those cases where the emergency requirements exceed those available through the purchase agreement and the backup service provider, the mutual aid plan can be activated for the agreement area.

Public Fire Safety Guidelines

- PFSG 04-40A-12, Fire Prevention and Public Safety Education; Simplified Risk Assessment March 2001
- PFSG 04-41-12, Fire Prevention and Public Safety Education; Community Fire Safety Officer/Team, January 1998
- PFSG 04-08-13 on Fire Station Location, September 2004

Shared Responsibilities (FPPA 1997)

FPPA notes that:

1. Two or more municipalities may appoint a community fire safety officer or a community fire safety team or establish a Fire Department for the purpose of providing fire protection services in those municipalities

Volunteer Firefighter (FPPA 1997)

- Means a Firefighter who provides fire protection services either voluntarily or for a nominal consideration, honorarium, training or activity allowance. (“pompier volontaire”) 1997, c. 4, s. 1 (1); 2001, c. 25, s. 475 (1).”

Appendix B – Staff Surveys

The following survey was presented to internal stakeholders:

Emergency Management & Training Inc. (EMT) have been hired to prepare a Fire Master Plan for the Municipality of Meaford. Your feedback is necessary in assisting EMT in developing this document for the Department. The intent of this document is to provide a 10-year community-driven master plan to guide operational improvements and enhance how services are provided throughout the community.

Please take the time to complete this survey. Your confidential responses will help to ensure focused action that continues to meet the diverse needs of our staff and residents. As such, we ask that you complete the survey no later than June 28, 2018.

Questions:

1. What are the things that make you most proud of the fire services provided for the municipality – for example, the level of professionalism, community involvement or making a positive difference within the community?

2. How do you think most people living in Meaford perceive the Fire Services?

3. What would you say are the top three issues facing the Fire Services in the municipality today?

4. There are nine core services that the Fire Services delivers. Which services do you believe are most valued by the community? Please rank in order of priority from 1 (most important) to 9 (least important). *Please use each number **only once** and use all nine numbers.*

- ___ Fire fighting
- ___ Rescue (motor vehicle)
- ___ Fire origin and cause investigations
- ___ Fire prevention and safety inspections
- ___ Community outreach / Public education
- ___ Hazardous materials and technical rescue response (water/ice rescue)
- ___ Public assist / Non-emergency responses
- ___ Emergency planning
- ___ Medical assist and response

5. Are there any other services that you believe the Fire Services should provide and why?

6. What improvements do the Fire Services need to make to its services to be more efficient and what do you believe would be the outcome by implementing these efficiencies?

7. If it were up to you, what would the fire services in the Municipality of Meaford be like 10 years from today and why?

8. Are there any other comments/suggestions that you would like to add that would help to improve the services the Fire Services deliver to the Municipality of Meaford and to the firefighters?

Thank you for completing this survey. Your feedback is greatly appreciated and will help to shape future service delivery efforts.

Appendix C – Community Surveys

The following survey was presented to external stakeholders:

Departments respond to a variety of calls that may include general assistance/information inquiries and responding to emergency incidents such as motor vehicle collisions, fires or medical emergencies.

In our ongoing efforts to ensure that the Municipality is meeting the needs of our community we are creating a 10-year community-driven Fire Master Plan to guide operational improvements and enhance how the service is provided throughout the community.

To accomplish this, we have engaged the services of Emergency Management & Training Inc. (EMT), a consulting firm that has worked with many fire departments in developing their Fire Master Plans, station assessments and fire service reviews across Canada.

Most of all, we need your help. Please take the time to complete this survey. Your confidential responses will help to ensure focused action that continues to meet the diverse needs of all residents.

The survey will be available until August 4, 2018.

Questions:

1. Are you aware of which fire department provides primary response to your residence/business?

- Meaford and District Fire Department
- Inter-Township Fire Department
- Unsure

2. What is your general impression of the Meaford and District Fire Department/Inter-Township Fire Department in relation to its level of professionalism, community safety, education and fire prevention awareness programs?

3. Have you been approached by the Meaford and District Fire Department/ Inter-Township Fire Department staff in relation to their public education or any other fire safety program?

- ☐ Yes
☐ No

4. How important are the following statements to you:

	Extremely important	Very important	Important	Not very important	Not important at all
How quickly the Fire Department gets to me if I have an emergency	☐	☐	☐	☐	☐
Whether the Fire Department will visit my home to give me safety advice and/or fit smoke alarms	☐	☐	☐	☐	☐
How much the fire services costs me as a tax payer	☐	☐	☐	☐	☐
How well the Fire Department works with other agencies to provide wider community safety services	☐	☐	☐	☐	☐
How often the Fire Department consults me about their services	☐	☐	☐	☐	☐
How often the Fire Department provides community training opportunities (e.g. fire extinguisher training; school safety programs; older and wiser program; smoke alarms; fire escape planning)	☐	☐	☐	☐	☐
How visible the Fire Department is at local community events	☐	☐	☐	☐	☐
Contacting assistance services (such as Red Cross or family services) after an emergency, as required	☐	☐	☐	☐	☐
Timeliness to any request for services or assistance from the Fire Service	☐	☐	☐	☐	☐
Purchasing and maintaining new and applicable equipment to ensure the	☐	☐	☐	☐	☐

department has reliable up to date equipment to safely deliver its services					
Continued and relevant training to meet the needs of the community	☐	☐	☐	☐	☐

5. What do you think are the top three issues facing the municipal Fire Department(s) today?

4. There are nine core services delivered by the Fire Departments. Which services are most important to you? Please rank in order of priority from 1 (most important) to 9 (least important). *Please use each number **only once** and use all nine numbers.*

- ___ Fire fighting
- ___ Rescue (i.e. motor vehicle accidents)
- ___ Fire/Arson investigations
- ___ Fire prevention and safety inspections
- ___ Community outreach / Public education
- ___ Hazardous materials (i.e. gas or chemical spills) and technical rescue response (i.e. water rescues)
- ___ Public assistance requests / Non-emergency responses
- ___ Emergency management and planning
- ___ Medical assist and response

5. Are there any additional services that you believe should be provided? If so, please specify.

6. If you could implement up to three things to improve how the current services are provided by the Fire Department(s), what would those things be?

7. Have you directly received service from the Meaford and District Fire Department or the Inter-Township Fire Department?

- ☐ Yes
- ☐ No (If no, skip to question 9)

8. Could you share some details of your experience and any recommendations for service improvements?

9. Would you be willing to participate in a special focus group to discuss improvements to the fire service?

- ☐ Yes
- ☐ No

10. Please provide your name and contact information so we can get in touch with you about participating in a focus group.

Thank you for completing this survey. Your feedback is greatly appreciated and will help to shape future service delivery efforts.

Appendix D – Public Fire Safety Guideline - Recruitment and Retention of Volunteer Firefighters

Volunteer Fire Service Personnel Recruitment and Retention

Public Fire Safety Guidelines	Subject Coding PFSG 04-84-13
Section Fire Administration	Date October 2006
Subject Volunteer Fire Service Personnel Recruitment and Retention	Page

Scope and Application:

This guideline provides municipal officials and Fire Chiefs of volunteer and composite fire services with a general overview of principles to consider in the recruitment and retention of volunteers.

There are many factors that contribute to the success of a volunteer recruitment and retention program. These include implementing organized marketing, recruitment, selection, hiring, training and retention plans.

Establishing and following a formal recruitment and retention program offers fire services the opportunity to increase the likelihood of finding, and keeping, the right people, doing the right tasks, at the right time.

Definition of Volunteer:

According to the *Fire Protection and Prevention Act* 1997, a volunteer firefighter is defined as “a Firefighter who provides fire protection services either voluntarily or for a nominal consideration, honorarium, training or activity allowance. (“pompier volontaire”) 1997, c. 4, s. 1 (1); 2001, c. 25, s. 475 (1).”

The majority of Fire Departments in Ontario (450 out of 478) utilize the services of volunteer fire service personnel. Recognized for their commitment and generosity, saving residents in Ontario more than an estimated one billion dollars annually, these professionals strive to provide skilled, competent and caring service.

Fire services that rely on volunteers to comprise, or enhance, their staffing capability continue to face the challenge of recruiting and retaining enough capable and experienced personnel. This impacts on the effective, efficient, safe and timely delivery of fire protection services.

Recruitment and Retention Program:

The Benefits

A coordinated, organized program demonstrates:

- how seriously the leadership takes the services provided and the individuals who provide that service,
- sound risk management principles,
- proactive vs. reactive leadership within the Department, and
- leadership's commitment to recognize volunteers, families and employers who support volunteerism.

It identifies:

- shortfalls and availability of volunteers in the community and,
- the number, type and quality of volunteers required to meet current or future needs.

It allows planning for:

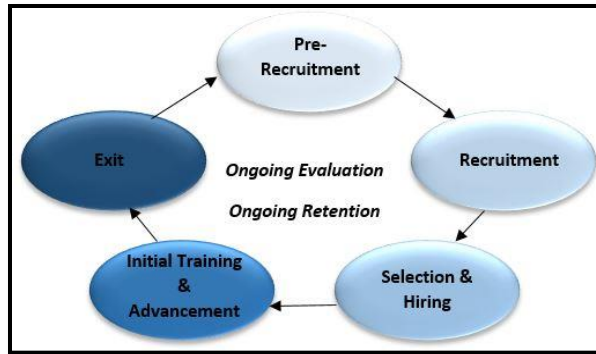
- recruitment and selection,
- retention and succession, and
- training and development of volunteers.

Responsibility for Recruitment

Recruiting and retaining volunteers does take effort. Creating a committee within the municipality and assigning specific tasks can create opportunities for others besides the leadership to contribute to the growth of the fire service and allows for a more concentrated effort.

Annual Recruitment and Retention Plan

An annual recruitment and retention plan is a cyclic, ongoing process that will assist the fire service in planning and focusing its efforts. It should be a logical consideration of the time of the year, changing commitments throughout the seasons, weather, and psychological impact of seasons, milestones in the Department, annual events and other trends. This will prevent the Department from coming up short in membership by not having good candidates to replace those leaving.



Policies and Guidelines

Fire service leaders benefit from having the necessary policies and procedures to ensure a safe, lawful, organized, empowering, non-discriminatory environment for their volunteers. No matter how large or small a Department, policies and operating guidelines are essential management tools that set the standard for conduct and provide guidance for action. It is suggested that existing municipal policies, if available, be referenced.

Evaluation

Evaluation of the recruitment and retention program is necessary to identify strengths and areas to improve. It is an ongoing process that is built into all the components of the program.

Components in the Recruitment and Retention Cycle:

Pre-Recruitment

Prior to recruiting, it would be beneficial to conduct a needs assessment to determine the role and number of volunteers required. Completing a Community Profile will determine community members who may best fit those roles. Answering these questions prior to recruiting enables the fire services to target specific individuals for specific roles and may increase the chance of success.

Recruitment

To promote diversity and involve volunteers with different skill sets, knowledge and perspectives, more than one recruitment method is necessary. Regardless of the method and knowing the Department is seeking the best possible candidates, effective marketing and communication strategies are necessary to draw the interest of potential volunteers.

Selection and Hiring

Once received and acknowledged, all applicants require screening to determine those who will move on to the next step in the hiring process.

The Fire Service takes great pride in service to communities. A screening process is essential in order demonstrate that the volunteers serve in the community's best interest. The leadership will have to decide which screening methods and tools are appropriate for their Department and should ensure that they reflect human rights and privacy legislation and existing municipal policies.

Upon selection, a written agreement between the volunteer and the fire department will ensure that expectations and responsibilities for each side are clearly identified and agreed to.

Orientation and Probation

Fire Departments and their volunteers will benefit from having an organized system to orient, train and advance recruits. One of the most successful and safe approaches for developing volunteers and establishing a commitment is to initially offer specific tasks that allow them to become involved in a limited way, followed by opportunities to grow into a role with more responsibilities.

Ongoing Recruitment Efforts

Successful recruitment efforts should be ongoing throughout the year to ensure that there is a waiting list of interested individuals to draw from.

Ongoing Retention Efforts

Recruiting and training new volunteers is just the beginning. The long-term challenge is to create an environment in which individuals continue to be motivated, interested, challenged, supported and satisfied with the work they've accomplished. Factors that contribute to this environment include leadership practices, operating guidelines, recognition initiatives, support efforts, teamwork and fellowship.

Exit Processes

When an individual leaves the Fire Department, it is a good opportunity to solicit input to determine the Department's strengths and opportunities for improvement. Exit processes should reflect understanding that, whether leaving on a positive or negative note, the volunteer and the fire department deserve fair and respectful treatment.

Resource Book:

The Application of Recruitment and Retention Principles:

The Volunteer Recruitment and Retention Resource Book that supports this guideline, was developed by the Ontario Fire Marshal's Office, in collaboration with representatives from the Ontario Fire Service.

This resource describes effective practices and strategies for recruitment and retention of Volunteer Fire Service personnel. It also provides a compilation of tools and templates that can be used to support the best practice or strategy. These may be photocopied or edited to meet the needs of the individual Fire Service.

A CD-ROM and printed copy of this resource has been made available to all Fire Services that maintain a Volunteer complement. It can also be accessed and downloaded from the Ontario Fire Marshal's public access website <http://www.mcscs.jus.gov.on.ca/>.

Codes, Standards & Best Practices:

Codes, standards and best practices resources are available to assist in establishing local policy. All are available at <http://www.mcscs.jus.gov.on.ca/>.

Volunteer Resource Management

The following resources and links describe effective practices and strategies for Volunteer Resource Management. The principles and topics can be applied to the fire service.

The Canadian Code for Volunteer Involvement <http://www.Volunteer.ca>

HR Council for the Voluntary and Non-Profit Sector <http://www.hrvs-rhsbc.ca>

Knowledge Development Centre, Canada Volunteerism Initiative <http://www.kdc-cdc.ca>

Please feel free to copy and distribute this document. We ask that the document not be altered in any way, that the Office of the Fire Marshal be credited and that the documents be used for non-commercial purposes only.

Additional References:

See also:

Office of the Fire Marshal's Public Fire Safety Guidelines

The following guidelines can be referenced when conducting a needs assessment to determine the role, quantity and characteristics of Volunteers required by the fire service.

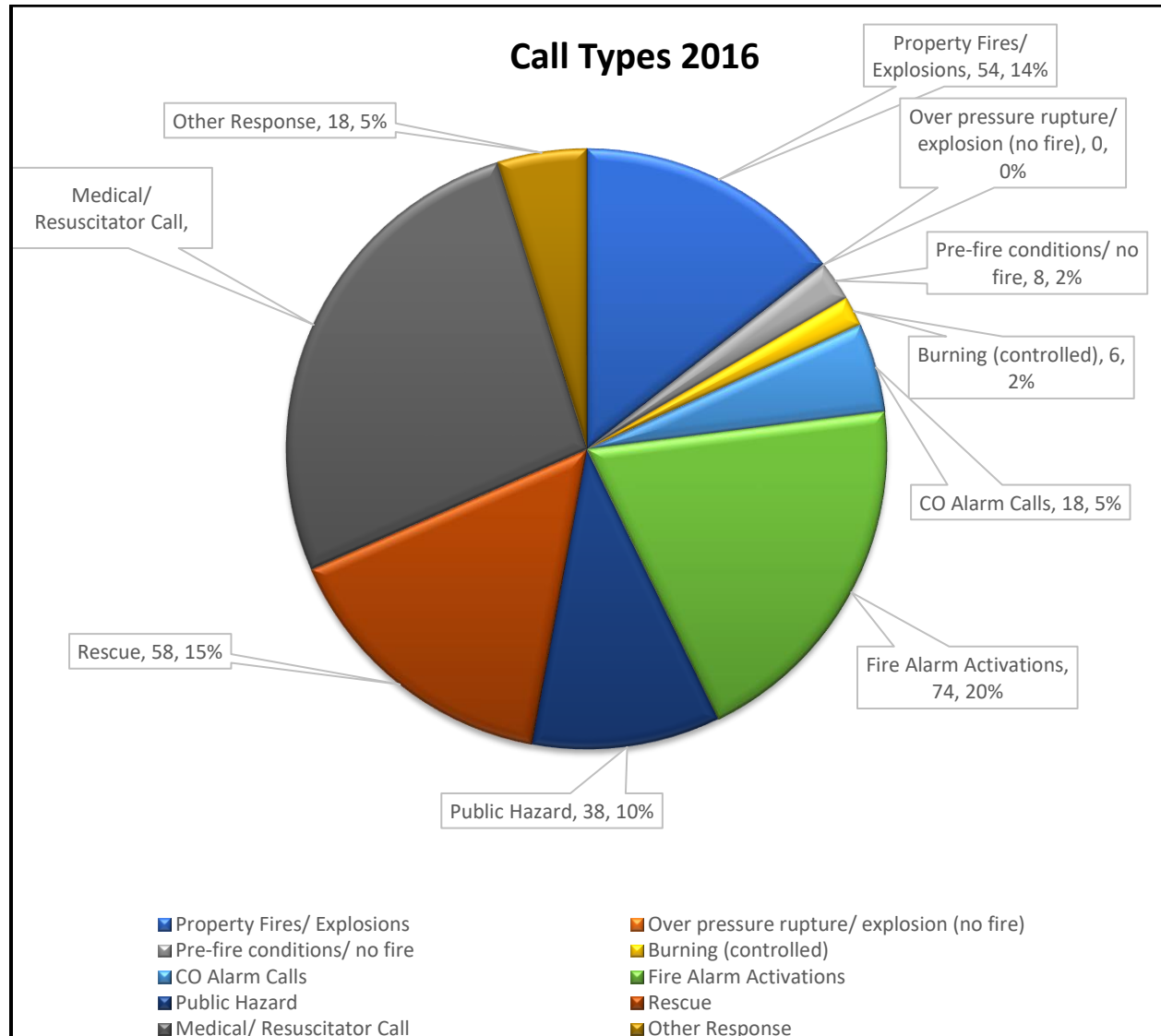
04-08A-03 Optimizing Rural Emergency Response

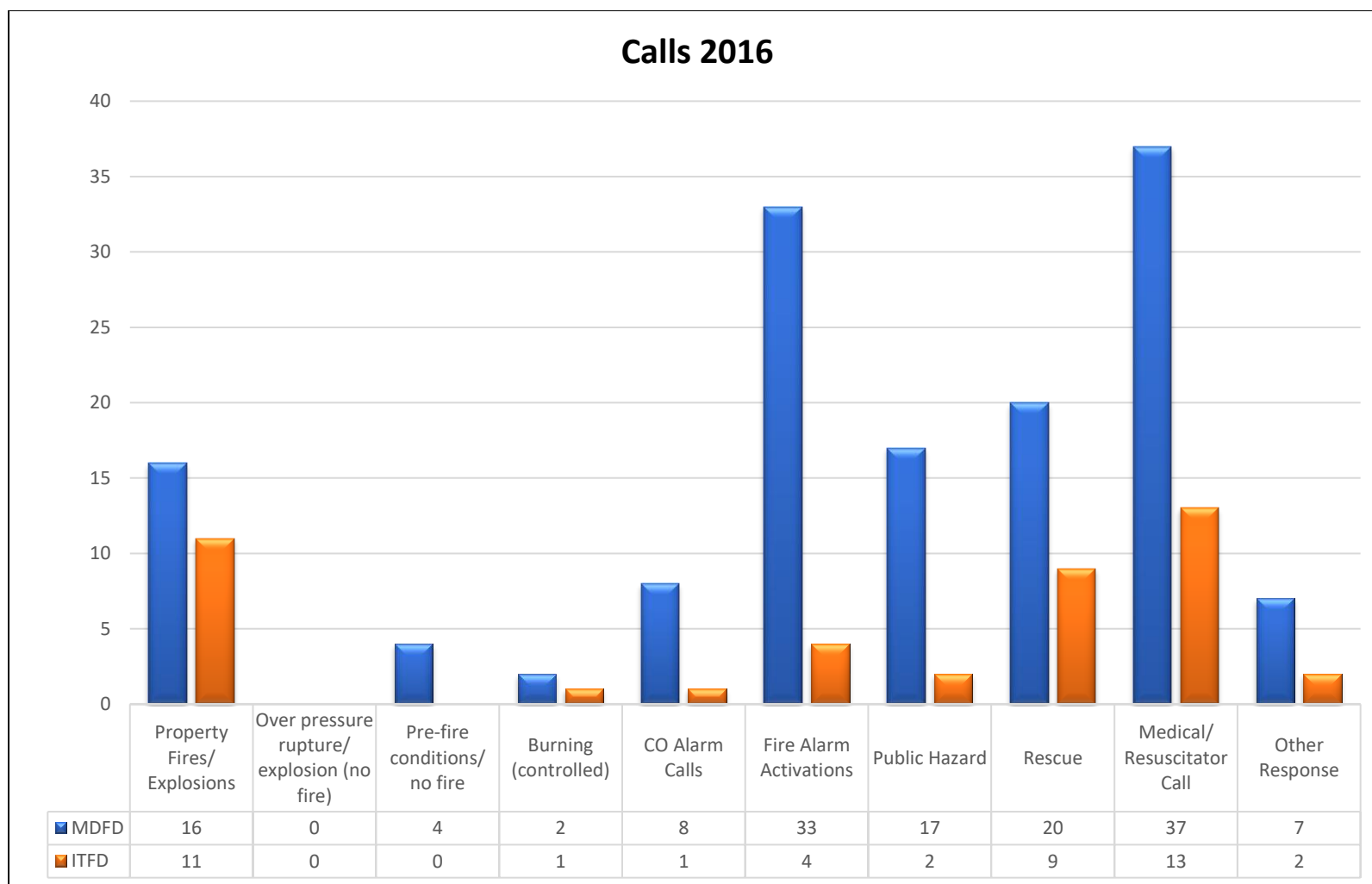
04-12-13 Core Services (Response and Support) and Associated Guidelines

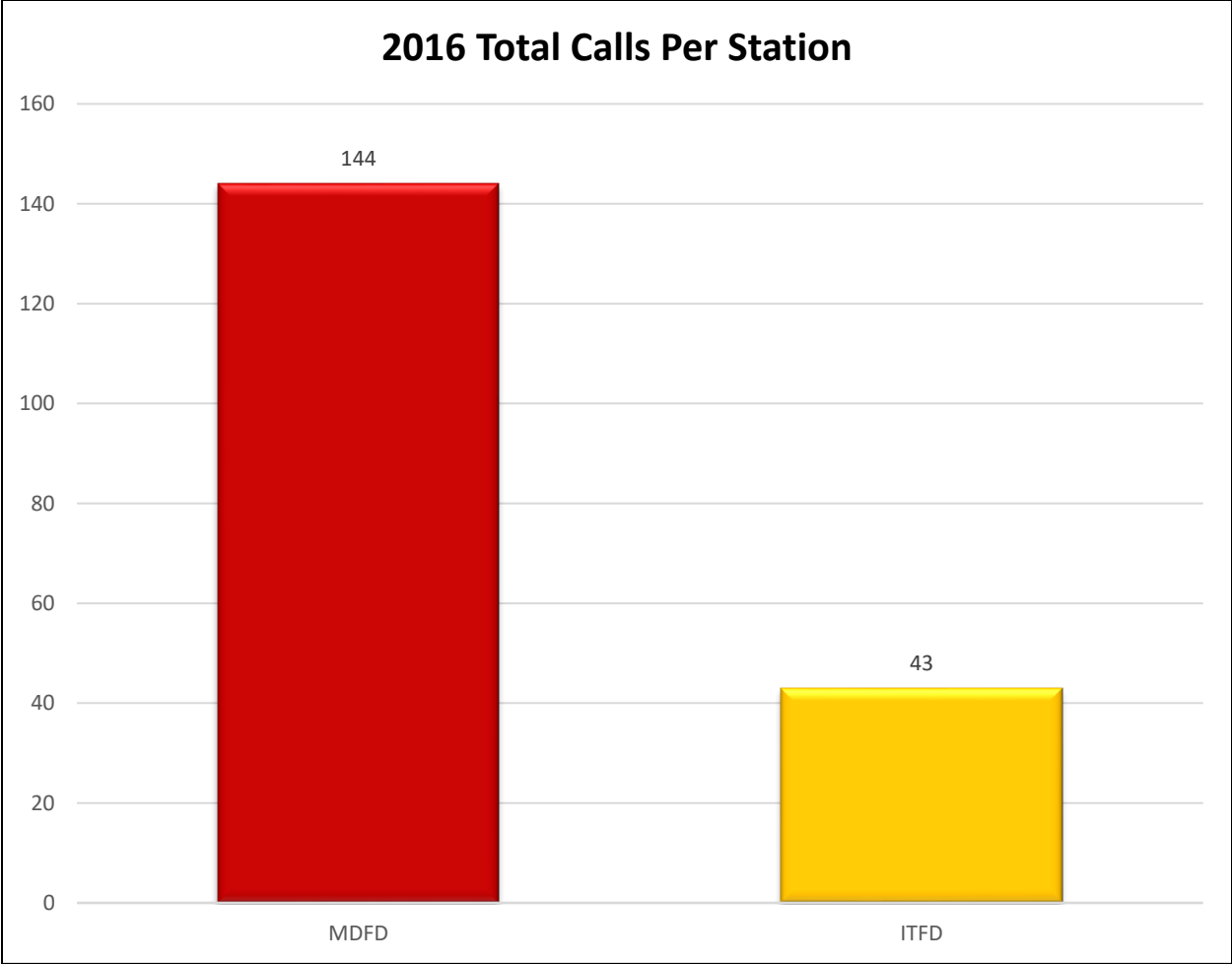
04-40A-03 Simplified Risk Assessment

Appendix E – Call and Response Data for 2012 - 2016

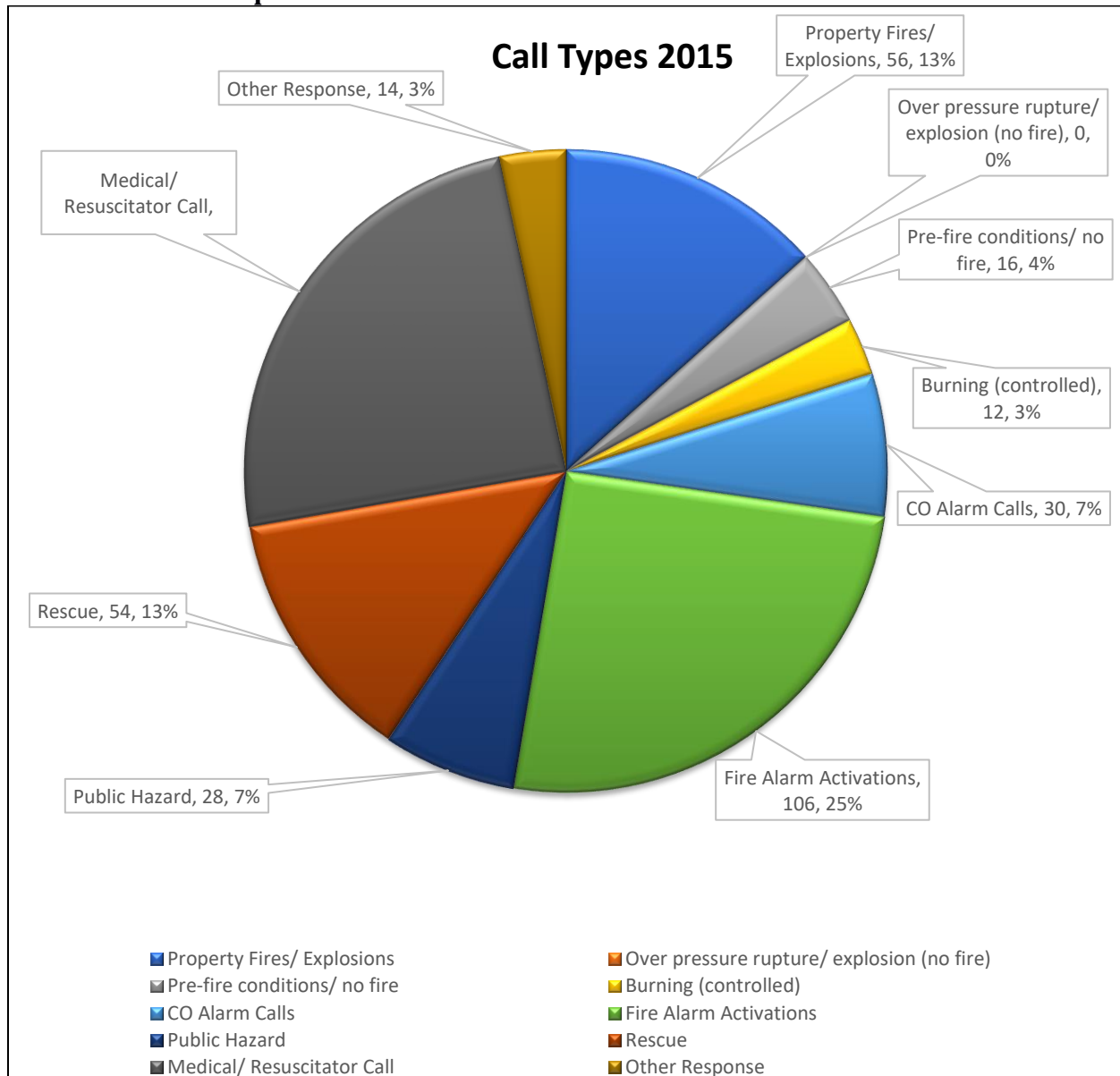
2016 Calls and Response Data

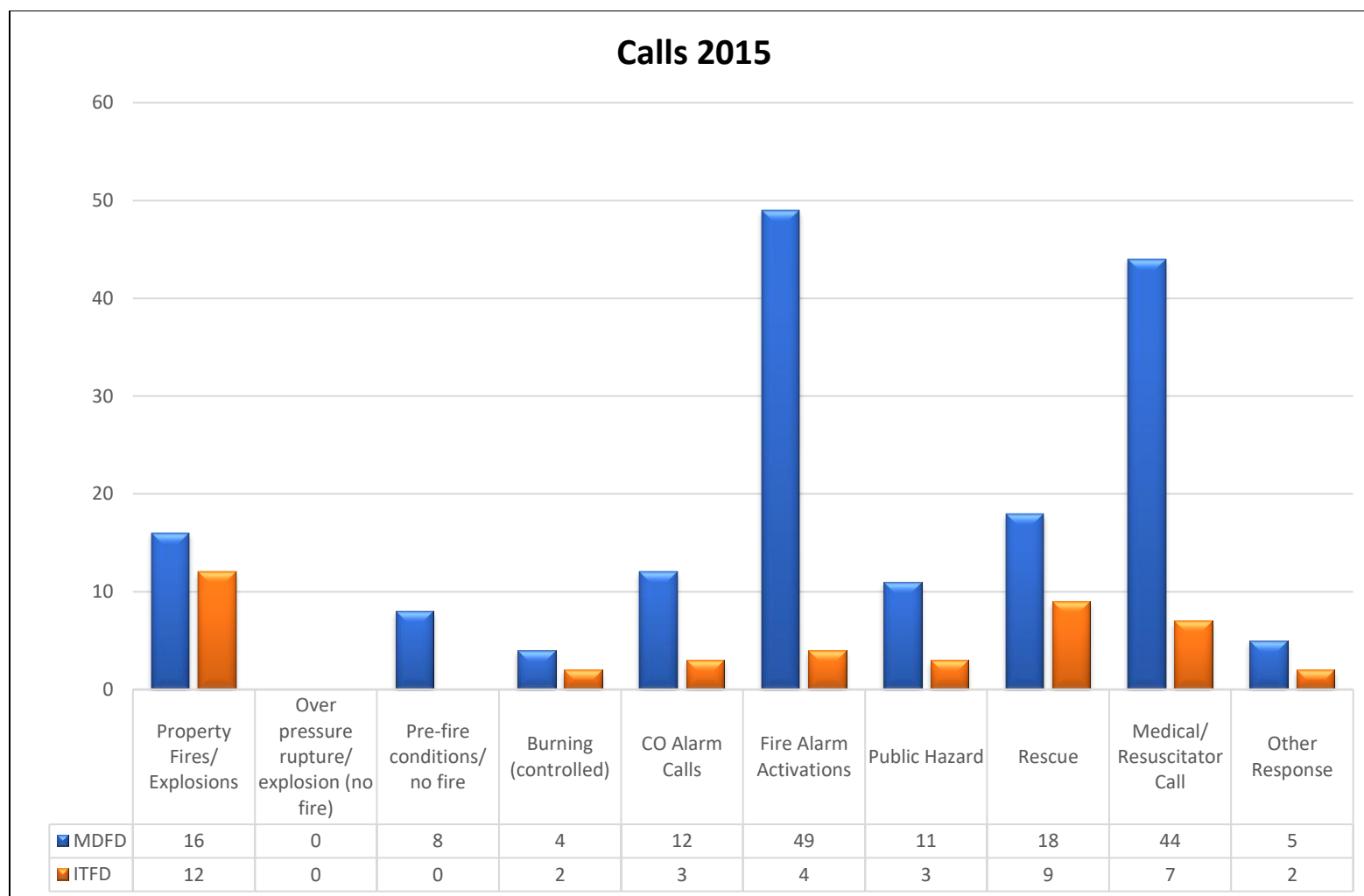


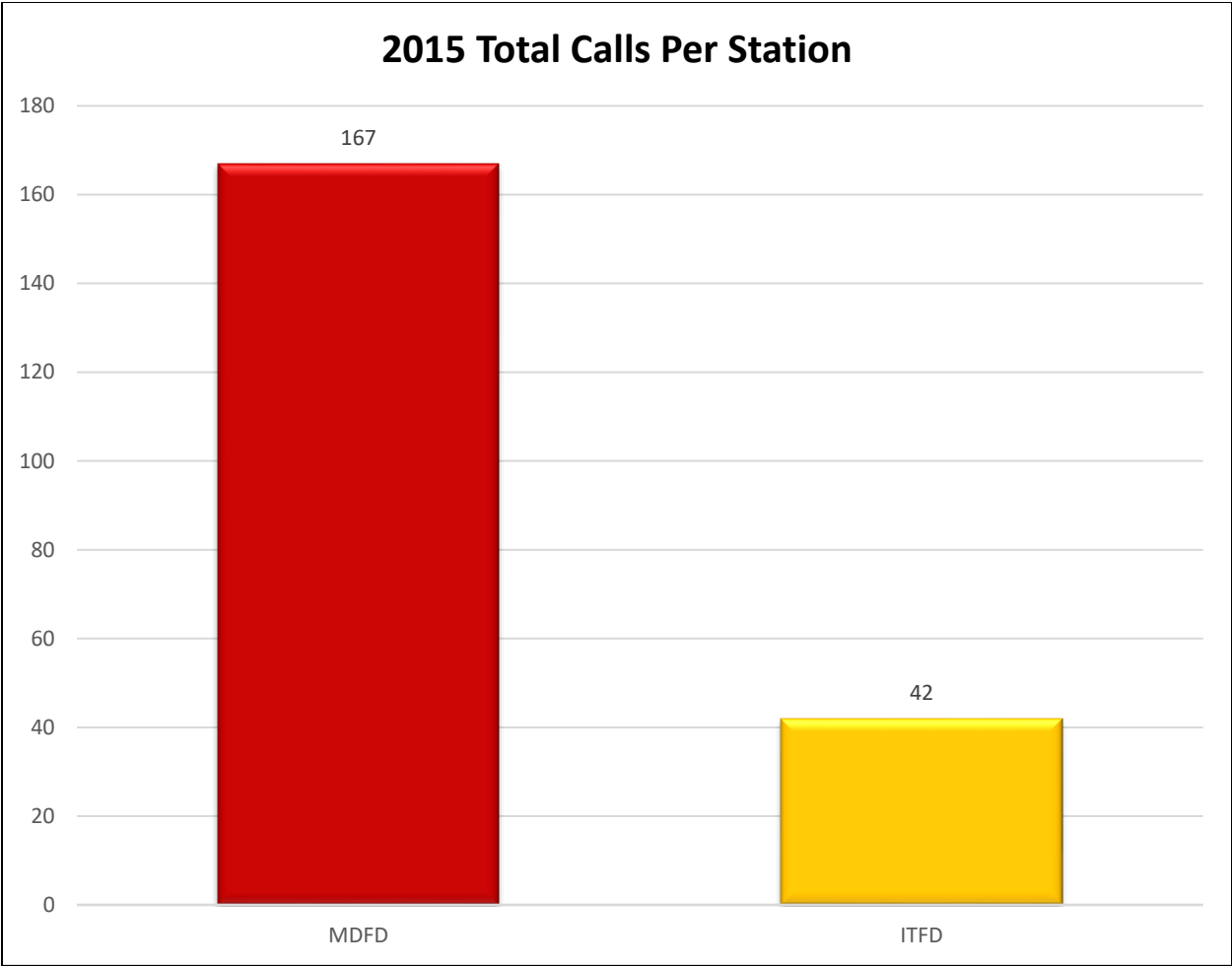




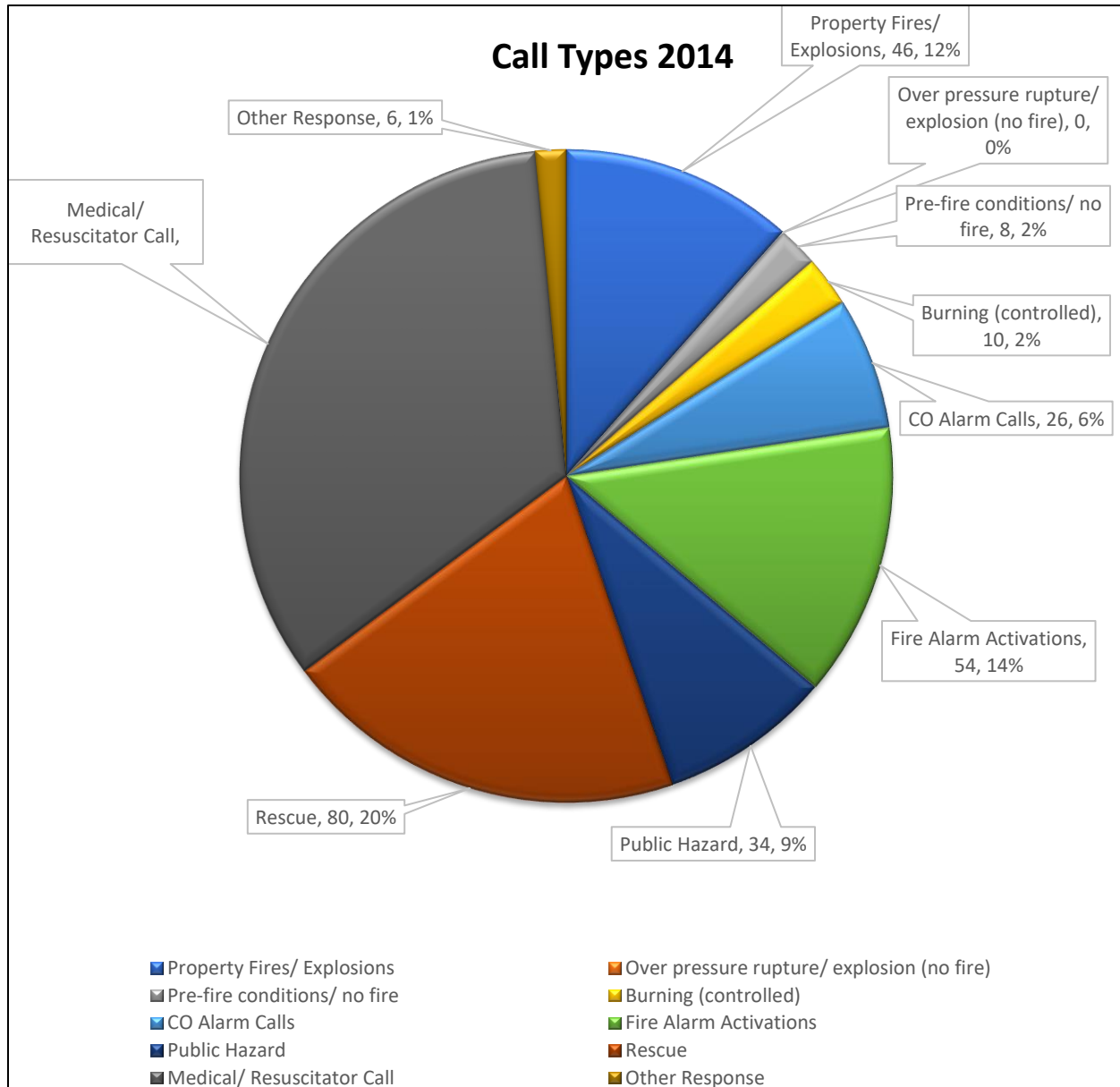
2015 Calls and Response Data

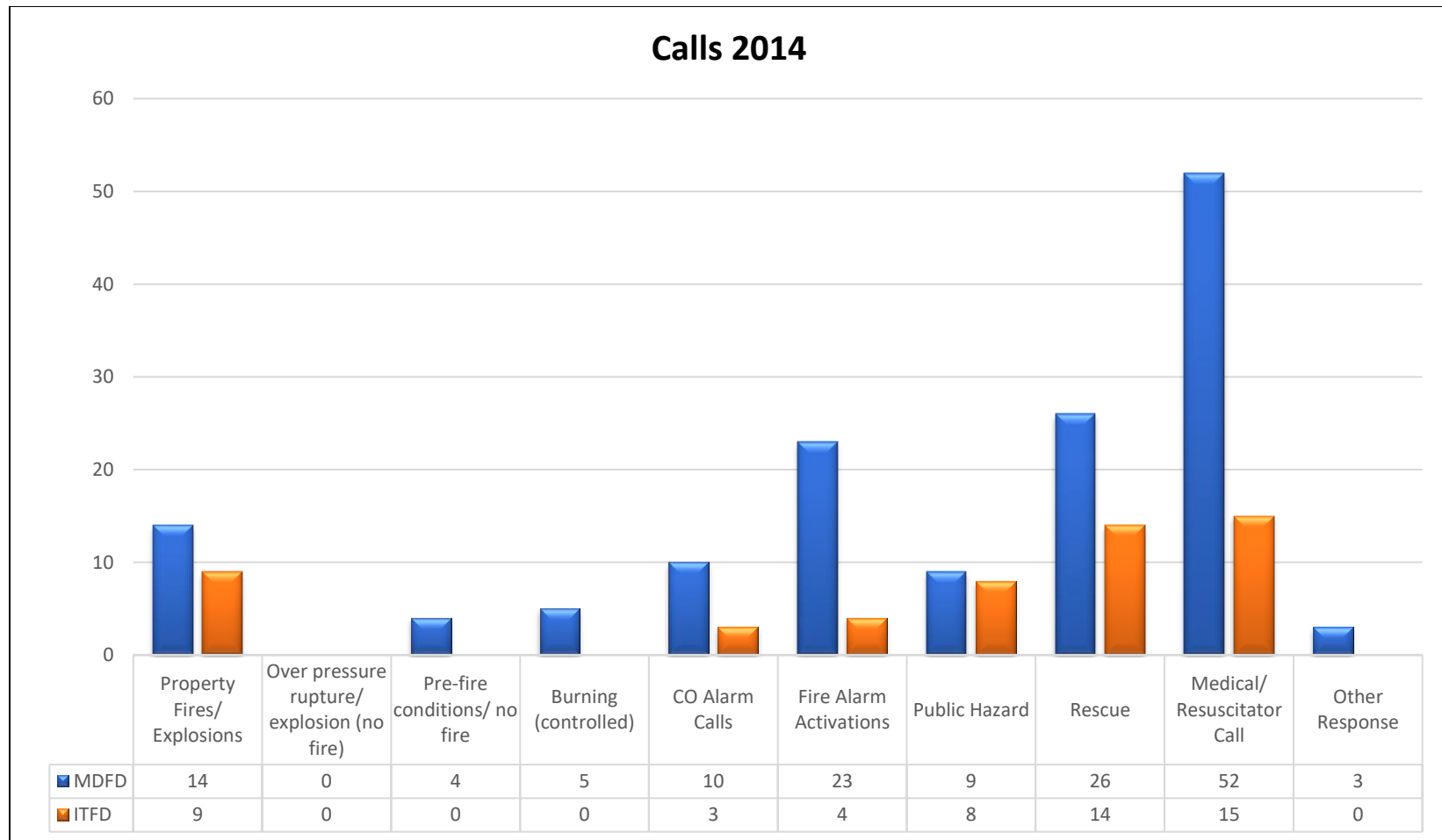


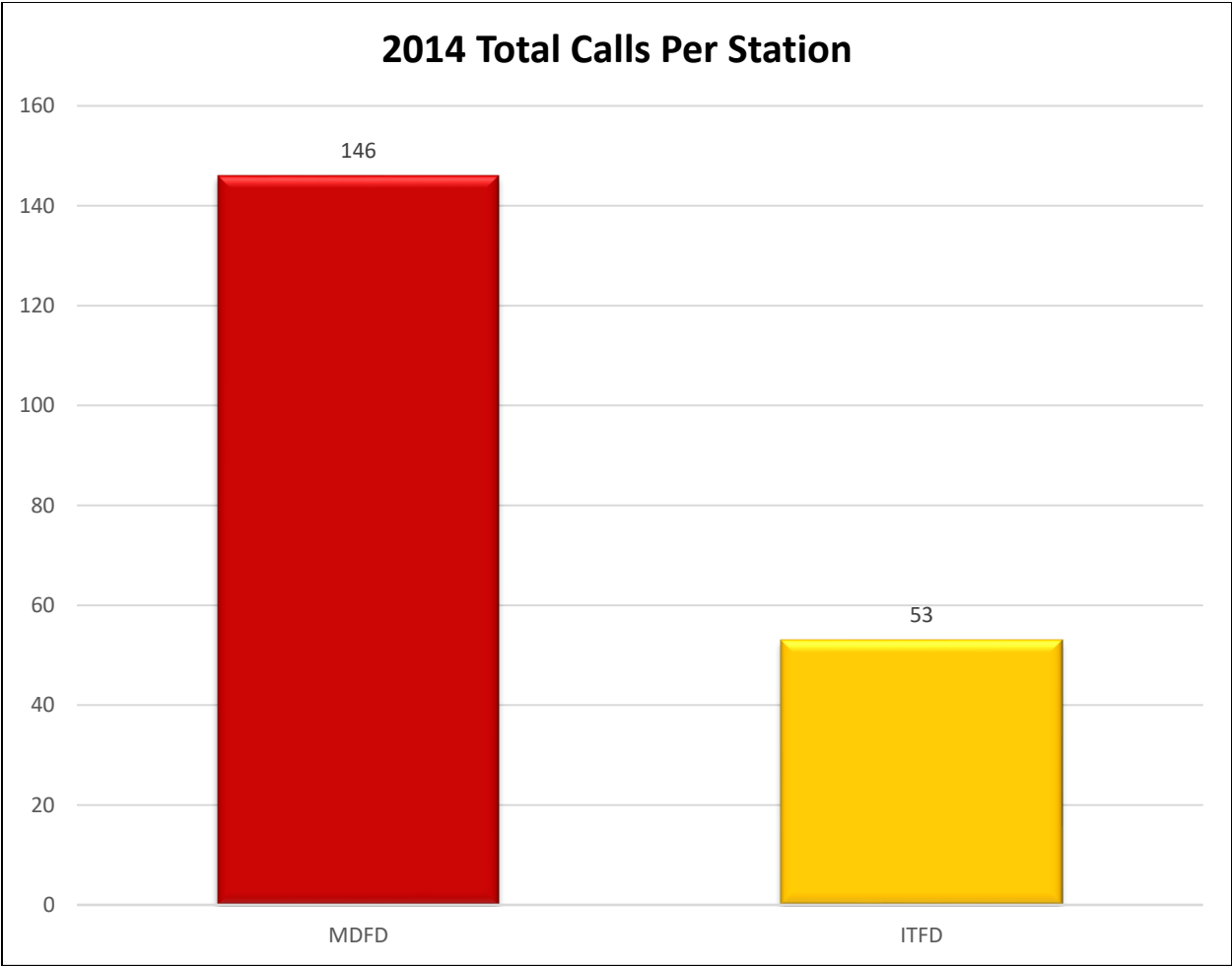




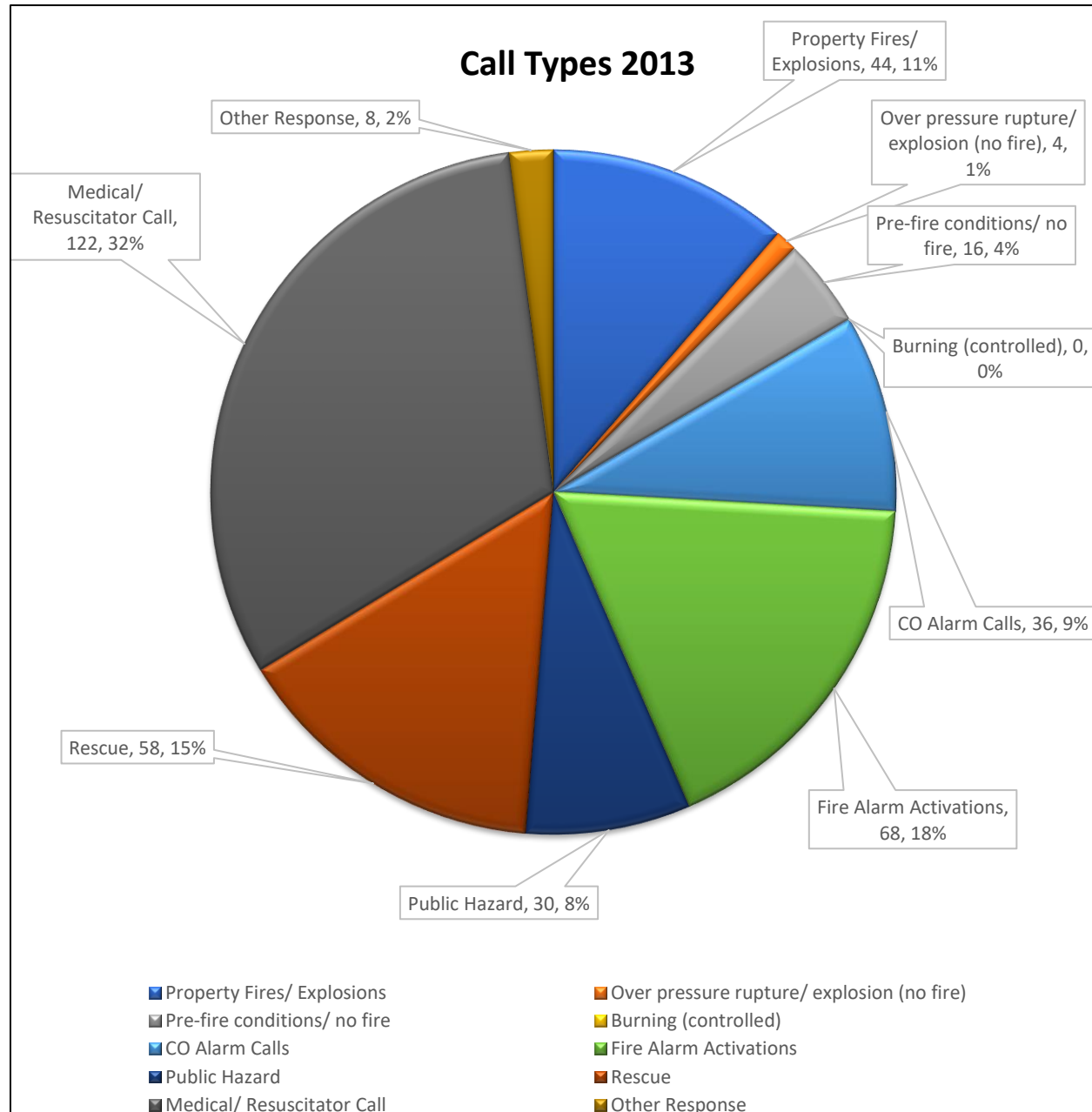
2014 Calls and Response Data

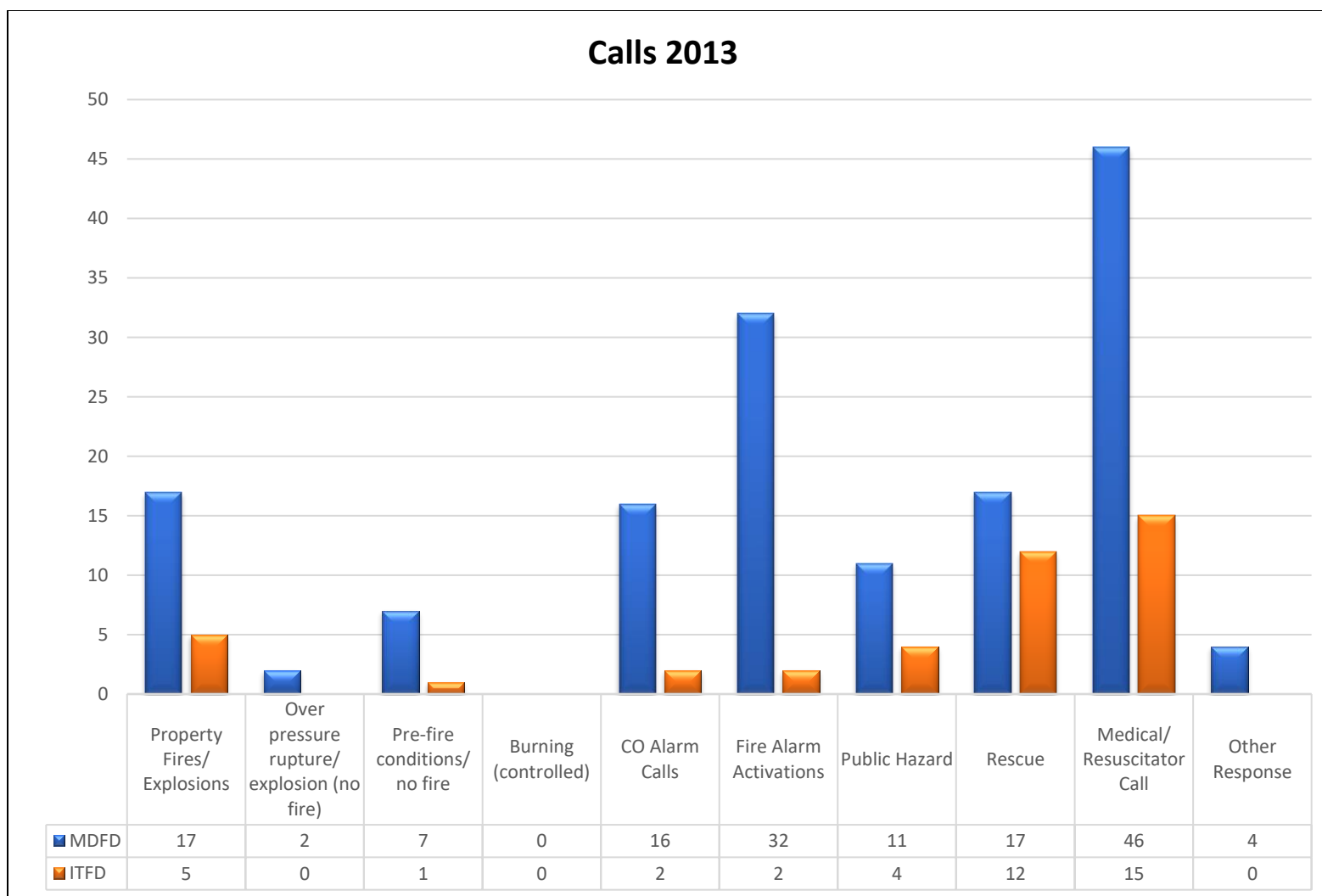


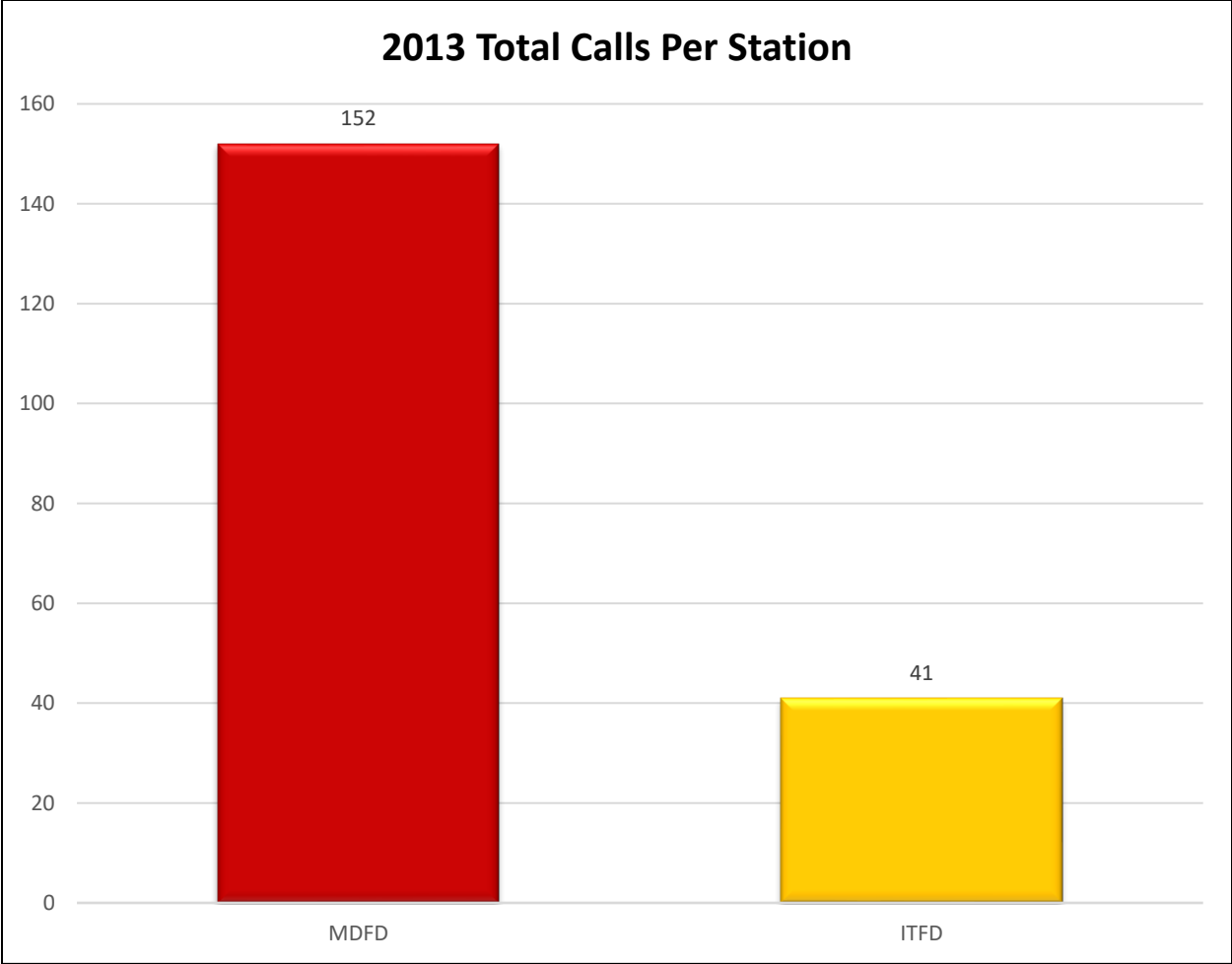




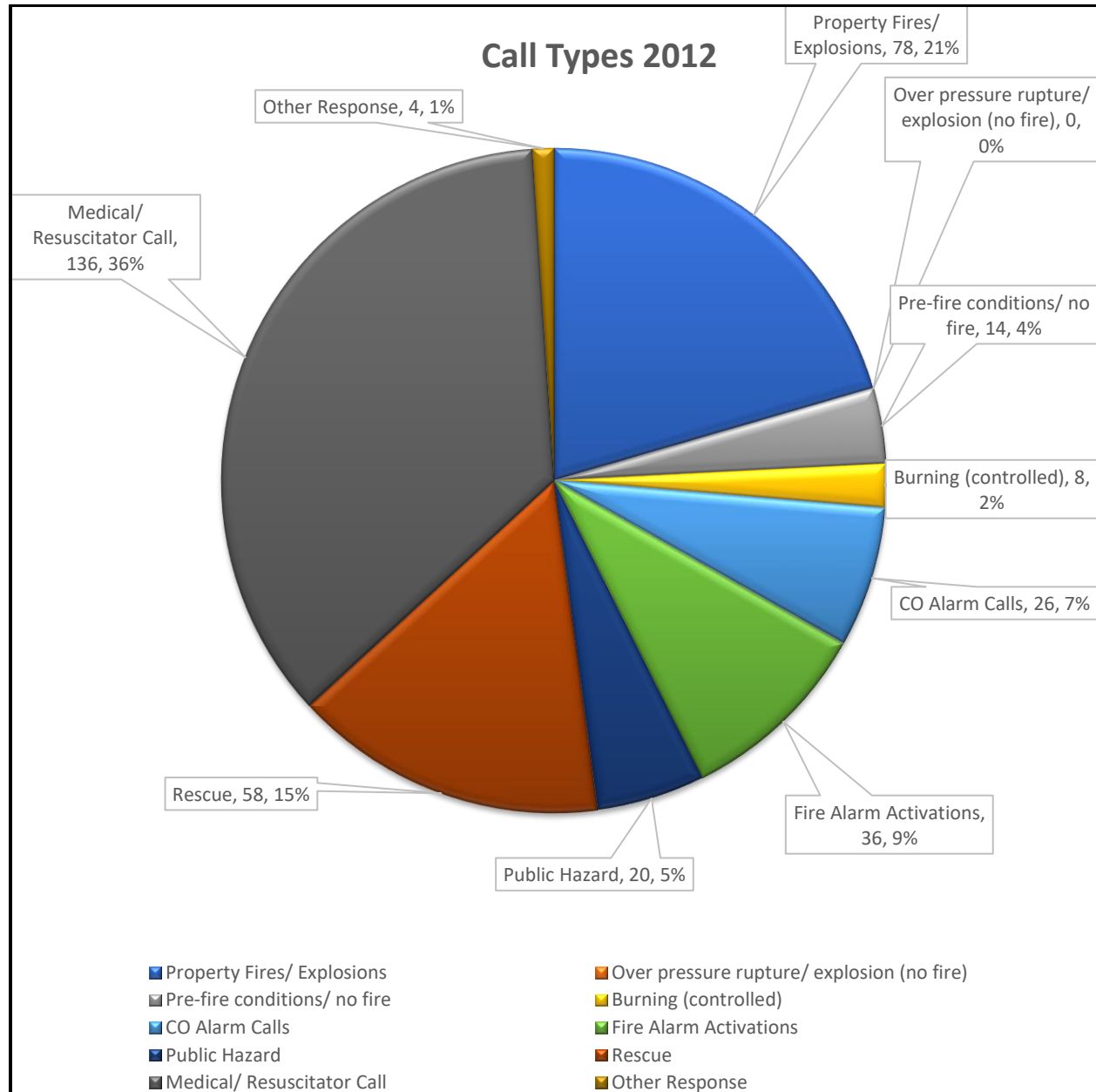
2013 Calls and Response Data

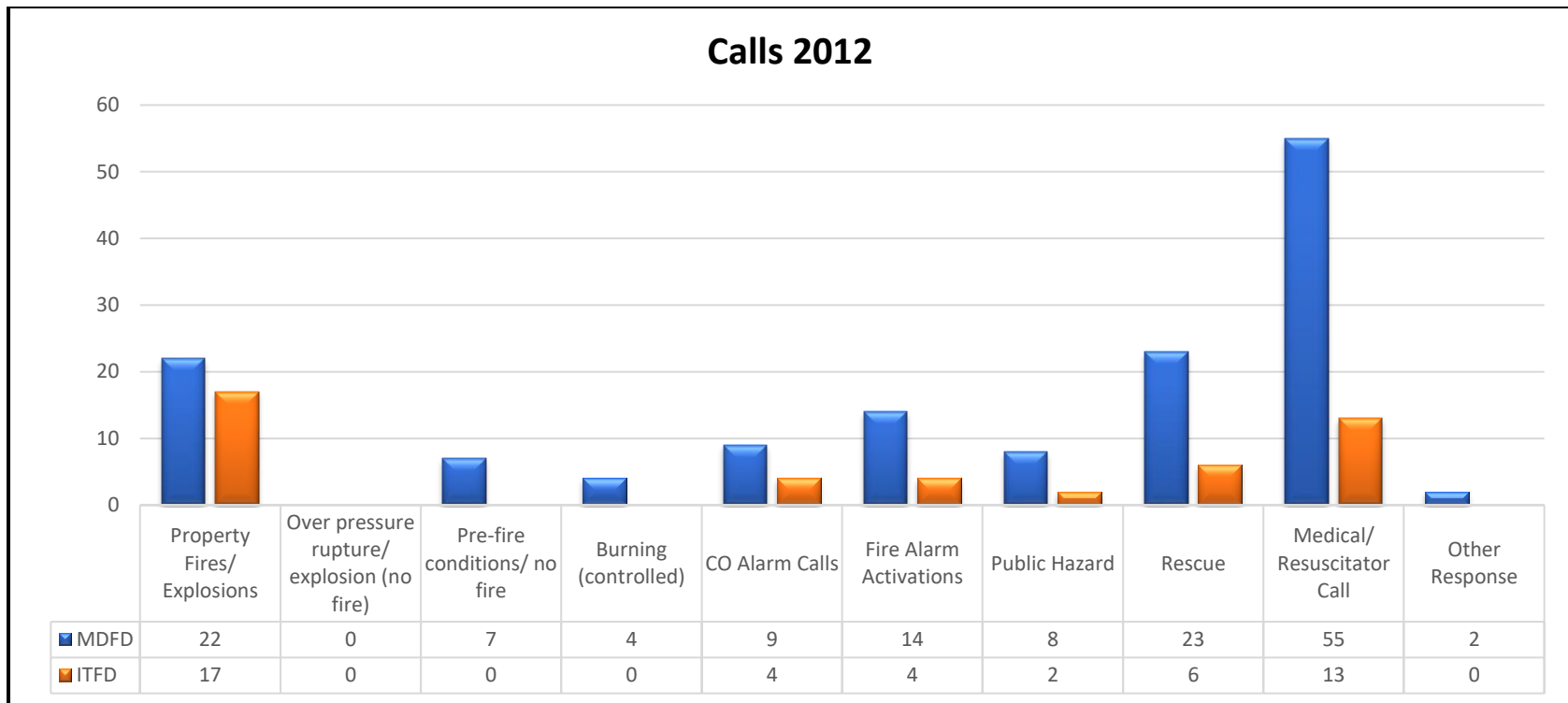


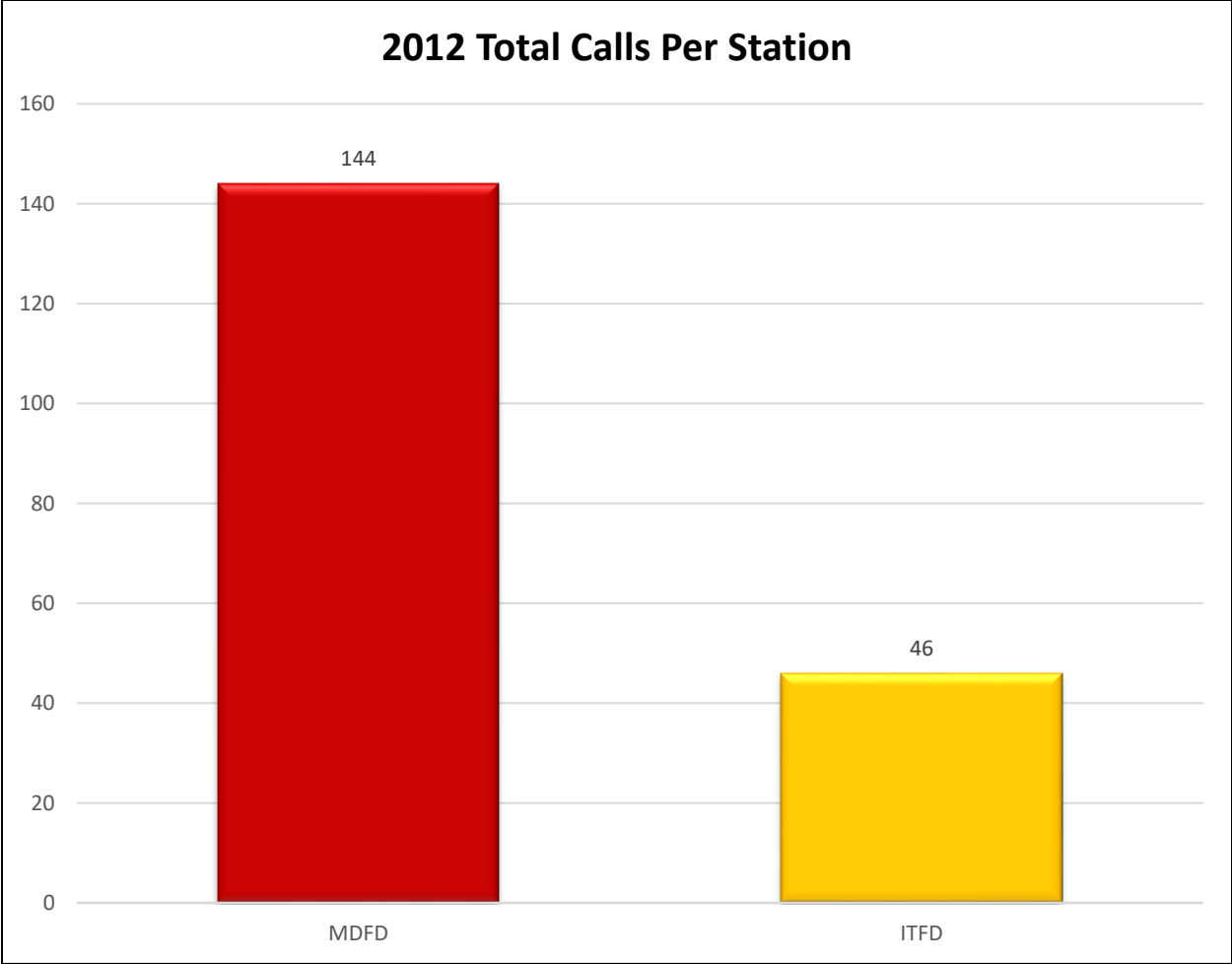




2012 Calls and Response Data







Appendix F – FEMA Standard Operating Procedures

Developing Effective Standard Operating Procedures for Fire and EMS Departments

SOP TOPIC AREAS – FEMA Information

This section presents, in outline format, a detailed categorization system and content descriptions for topic areas of fire service standard operating procedures. The list is intended to serve as a starting point for fire departments and other emergency services organizations that are developing or reviewing SOPs.

However, different categorization systems are possible, so departments should tailor the information to their own unique operational needs, organizational structure, and management preferences. The SOP framework presented here is organized into three broad areas: *Management and Administration*, *Prevention and Special Programs*, and *Emergency Operations*. *Emergency Operations* is, in turn, subdivided into *General Emergency Operations* and five common fire service operational missions: *Fire Suppression*, *Emergency Medical Response*, *Hazardous Materials Response*, *Technical Rescue*, and *Disaster Operations*.

The intention is to describe SOP requirements that are similar for all operational missions under *General Emergency Operations*, and mission-specific requirements in the appropriate category. This approach minimizes redundancy and reflects common organizational and administrative patterns. However, some duplication is necessary when SOP categories are appropriate for two or more functional areas (e.g., Personal Protective Equipment), but the content of the categories differs (e.g., firefighting turnout gear versus PPE used in emergency medical care).

MANAGEMENT AND ADMINISTRATION GENERAL ADMINISTRATION—Procedures related to activities that maintain and support the organization, including financial management, resource management, information processing, and maintenance and development of the organizational infrastructure.

- **Organization**—Establishment of the organization, mission statement, policy on SOPs, chain of command, code of ethics, drug-free workplace, inter-department communications.
- **Facilities**—Non-smoking areas, telephones and usage, sleeping facilities, apparatus bay doors, portable fire extinguishers, smoke and carbon monoxide detectors, storage and use of fuels, facility maintenance and repairs, facility security, public access policy, workplace violence.
- **Emergency Vehicles and Special Apparatus**—Fueling of vehicles, inspections of vehicles, out-of-service vehicles, non-departmental riders, care and maintenance of vehicles and special apparatus, repair of vehicles and special apparatus.

- Equipment and Supplies—Personal protective equipment, small tools and equipment, power tools and equipment, SCBA maintenance, hose testing and maintenance, inventory control procedures, ropes and harnesses, communications equipment, public use requests.
- Finance—Budgeting, procurement and purchasing, out-of-town travel, expense reimbursement.
- Fundraising—Income-producing activities, public solicitations, grant applications, special requirements and activities, managing donations.
- Training, Education, and Exercises—In service training (initial and refresher), live fire training exercises, training evaluation, certification, requests for training, training records, interorganizational/community exercises.
- Information Management—Incident reporting system, record-keeping systems, confidentiality and access to information, use of computer equipment, archiving information.

MEMBER HEALTH AND ASSISTANCE PROGRAMS—Procedures affecting member health, fitness, and performance, to include assessment, enhancement, and enforcement activities.

- Medical Screening/Health Assessment—Fire department physician, baseline/entry and annual examinations, post-injury/exposure examinations, exercise screening/stress tests, vaccinations, medical/exposure records.
- Health and Wellness Promotion—Fitness assessment, fitness conditioning programs, healthy lifestyles.
- Performance Evaluation Process—Work performance assessment, appeal process.
- Post-Injury Rehabilitation—Post-traumatic incident debriefing, occupational therapy, work hardening programs, disability/job assessment, ergonomics/job engineering, reassignment options.
- Employee/Member Assistance—Substance abuse cessation, critical incident stress management, professional development, family relations, legal and financial services, mental health services.
- Facility Safety—Code requirements, basic safety standards, personal behavior and hygiene, food preparation safety, infection control in stations (cleaning, disinfecting, storage, etc.), facility maintenance and repairs, station safety and health inspections and enforcement.
- Hazard Communication—Employee right-to-know requirements, employee participation, maintenance and access to safety information, employee notification and training.

ORGANIZATIONAL PLANNING AND PREPAREDNESS—Procedures affecting organizational analysis and planning systems for management, administration, and emergency operations.

- Strategic/Master Planning—Interorganizational coordination and planning, organizational planning (long-term and short-term), administrative systems, organizational evaluation.

- **SOP Development**—Committee organization, schedule, needs assessment process, development process, approval, distribution, implementation, evaluation.
- **Risk Management**—Identification of workplace hazards, vulnerability and risk assessment, risk control techniques, safety systems, risk management monitoring.
- **Emergency Operations Planning**—Community right to know, general operations planning, facility and operational preplanning (fire suppression, emergency medical response, hazardous materials response, technical rescue, disaster operations), resource classification.
- **Mutual/Automatic Aid**—Requirements for outside aid, resource lists, inter-jurisdictional unified command, evaluating aid agreements.

PREVENTION AND SPECIAL PROGRAMS PUBLIC INFORMATION AND EDUCATION—Procedures to promote awareness of hazards, provide emergency information, encourage prevention, and foster good will and support in the community.

- **Working with the Public**—Special populations, use of information technology, distribution and dissemination channels, personal and professional behavior.
- **Working with the Media**—Media rights and responsibilities, personal and professional behavior, using print and broadcast media (interviews, briefings, news releases, media events, advertising, etc.).
- **Emergency Public Information**—Rights of privacy and public safety, media access to incident scenes/entry zones, media staging or information centre, incident information flow, legal issues.
- **Public Education**—Program goals and objectives, use of department and community resources, conducting programs and activities, evaluating program accomplishments.
- **Public Relations**—Customer service strategies, building/maintaining departmental image, dealing with citizen complaints, member contacts with municipal/elected officials and media representatives.

BUILDING INSPECTIONS AND CODE ENFORCEMENT—Procedures for evaluating and enforcing safety in buildings and commercial operations.

- **Authorities and Codes**—References to applicable government regulations and policies, community plans and zoning ordinances, codes and standards in force locally (buildings, construction, fire prevention, employee safety and accident prevention, hazardous materials, health, etc.).
- **Design and Plans Review**—Working with business/facility owners and managers, review teams, review processes, approval processes, notification procedures, documentation and reporting.

- Residential Inspections—Working with homeowners, scheduling inspections, conducting inspections, documentation and reporting.
- Commercial Inspections—Working with business owners, scheduling inspections, conducting inspections, documentation and reporting, coordinating company and prevention division inspections.
- Industrial Inspections—Working with industry, scheduling inspections, conducting inspections, documentation and reporting, coordinating company/hazmat and prevention division inspections.
- Code Enforcement—Project monitoring, inspection follow up, negotiations, sanctions.
- Record Keeping—Documentation and reporting systems, information dissemination, archiving.

SPECIAL PROGRAMS

- Fire Cause and Arson Investigation—Procedures for investigating fires, which may include arson detection, cause and origin detection, and evidence collection and preservation.
- Hydrant Maintenance—Programs and procedures for inspecting and maintaining hydrants.
- Other Special Programs—Guidelines for other special programs conducted by the department to support management, administration, or emergency operations.

EMERGENCY OPERATIONS GENERAL EMERGENCY OPERATIONS - OPERATING EMERGENCY

VEHICLES—Procedures for the safe and effective operation of emergency vehicles and special apparatus, including fire engines, ambulances, trucks, tankers and other fleet vehicles.

- Driving Emergency Vehicles—Driver qualifications, skills maintenance, driver behavior, use of warning devices, roadway operations (traffic laws, intersections, speed, passing, following other vehicles), backing up, parking, operation in high risk areas.
- Riding Emergency Vehicles—Permitted vehicle occupants, passenger behavior, safety in emergency vehicles, reporting safety problems and violations.
- Operating Special Apparatus—Operator qualifications, operator behavior, placement and operation of special apparatus, safety in special apparatus operations, operation in high-risk areas.
- Vehicle Accident Reporting and Investigation—Accident scene procedures (information gathering, injury assessment, notification, etc.), reporting forms and documentation requirements, post-accident investigation (examination of scene, interviews with participants and witnesses, etc.), report preparation and dissemination.
- Use of Personal Vehicles—Driver behavior, roadway operations, permitted vehicle occupants, reporting safety problems and violations.

SAFETY AT EMERGENCY INCIDENTS—General procedures outlining safety considerations for agency

personnel at various types of emergency incidents.

- Applicable Standards—Authorities recognized by the department as defining safe work practices in emergency response (e.g., OSHA/EPA regulations, state and local regulations, NFPA 1500, and other professional association or consensus safety standards).
- Risk Management Guidelines—General guidelines for identifying hazards and minimizing risk in emergency response, including, for example, emergency responder qualifications, standard safety guidelines, use of pre-plans, initial evaluation of risk, development of site safety plans, assignment of safety personnel, control of scene access, regular re-evaluation of conditions, etc.
- Safety Officer—Authority and responsibilities of the Incident Safety Officer and the Health and Safety Officer, incident scene safety management procedures, post-incident follow up, reporting and documentation.
- Protective Clothing and Equipment—General procedures for selecting, using, maintaining, inspecting, fit testing, decontaminating, and disposing of personal protective clothing and equipment, such as PASS Devices, SCBA, HEPA Mask Respiratory Protection, etc.
- Personnel Accountability System—Supervisor responsibilities, member responsibilities, incident arrival procedures, personnel tracking and inventory procedures, maintenance of supplies.
- Responder Exposure Control—Personal hygiene, use of PPE/barrier protection, incident operations, incident recovery (disposal, cleaning, decontamination, storage, etc.), post-exposure procedures.
- Hearing Conservation—Standards for noise exposure, hearing protection, noise reduction, monitoring incident noise, assessment of hearing problems, documentation and reporting.
- Operating in a Hostile Environment—Assessing hostile environments, dealing with potentially violent persons, identifying civil disturbance situations and terrorism incidents, interaction with law enforcement, delaying or suspending operations, modifying operations, resuming normal operations.
- Operating on Roadways—Operations near moving traffic, traffic control, use of warning devices, vehicle/ scene stabilization, coordination with law enforcement personnel, standard procedures and precautions, special situations (e.g., downed power lines).
- Incident Scene Rehabilitation—Rehab officer functions, monitoring responders' emotional and physical condition, rotation of personnel, requesting relief, rehabilitation area and supplies, food and fluid replenishment.
- Medical Support—Systems to provide medical care for injured responders: supplies, treatment area, medical evaluation and treatment, post-incident follow up.
- Incident Termination—Operational debriefing/defusing, release of information, releasing the scene to another party (owner, police, hazmat cleanup crew, etc.).

COMMUNICATIONS—General procedures governing communications during emergency incidents.

- System Access—Activities that provide the community access to the emergency response system, including call receipt, call routing, call processing, and instructions given over the telephone to callers.
- Definition of Alarms/Dispatch Protocols—Procedures and protocols for assigning and dispatching units to specific types of emergencies or to escalating emergencies.
- General Procedures—General procedures and protocols for communications among dispatch and field personnel in emergency and non-emergency incidents.
- Emergency Signals—Initiation of emergency signals, radio signals, other warning signals, personnel actions.
- Alternate Radio Frequencies—The use of alternate radio frequencies on major incidents or incidents where the Incident Command/Incident Management System has been activated.
- Mobile Data Terminals (MDTs)—Procedures outlining the use of Mobile Data Terminals (MDTs) on fire and emergency apparatus, as well as in-station dispatch terminals.
- Mutual Aid Communication—Procedures for communicating with units and personnel from other jurisdictions on mutual aid responses.
- Situation/Status Reports—Procedures describing when and how to complete situation/status reports for major emergency and non-emergency incidents.

COMMAND AND CONTROL—General procedures directing use of the Incident Command/ Incident Management System and controlling inter-agency coordination.

- Incident Command/Incident Management System—General description of the Incident Command/ Incident Management System, including organizational structure, assignments, activation, general procedures, etc.
- Mutual/Automatic Aid—Resources available for different types of emergencies, requesting or responding to requests for aid, interacting with mutual/automatic aid agencies, documentation and reporting, cost/ resource recovery.
- Incident Scene Management—General procedures for activating the Incident Command/Incident Management System, ICS/EOC interface, designating an Incident Safety Officer, organizing the scene, use of control zones, placing resources, supervising personnel, controlling access, controlling bystanders and crowds, coordinating with other agencies, etc.
- Staging—Procedures for staging units and apparatus at emergency scenes, which may include specific procedures for staging and the designation and use of staging officers.
- Transferring Command—Process for transferring command once established on an emergency scene.
- Public Information—Duties and procedures of the Public Information Officer and other personnel at emergency incidents, dealing with relatives/family liaison.

- **Record Keeping**—Records and information that must be maintained when activating or terminating the Incident Command/Incident Management System.

SPECIAL OPERATIONS—Procedures for special emergency response operations and situations.

- **Aircraft Operations**—Procedures for using department-owned aircraft in emergency operations: qualifications of personnel, care and maintenance of aircraft, requests for air support, operating aircraft, use of special equipment.
- **Boat and Watercraft Operations**—Procedures detailing operation of agency boats and watercraft: qualifications of personnel, care and maintenance of watercraft, requests for watercraft support, operating watercraft, use of special equipment.
- **Special Unit Operations**—Procedures explaining operation of any specialty unit within an agency, such as bicycle teams, all-terrain vehicles, snowmobiles, etc.
- **Bomb/Hazardous Device Threats or Confirmed Incidents**—Procedures for bomb threat incidents: agency responsibilities, mutual aid assistance, points of contact, bomb squad response protocols, evacuation of civilians, hoax procedures (phone threats), communication policy, preservation of evidence.
- **Terrorism Incidents**—Procedures for terrorism incidents: agency responsibilities, mutual aid assistance, points of contact, general response protocols, task force operations, secondary devices, mass decontamination of casualties and emergency responders, mass evacuations, preservation of evidence.
- **Civil Disturbances**—Procedures for operations during civil disturbances: protection of responders, initiating and suspending operations, use of staging areas, task force operations, police escort procedures, interaction with law enforcement and emergency management agencies.

POST-INCIDENT OPERATIONS—Procedures for activities after incidents designed to assess and document actions, restore capabilities, address problems, and improve future results.

- **Post-Incident Analysis**—Methods for identifying lessons learned and potential corrective actions following response to an emergency incident: incidents to be reviewed/analyzed, participants and roles, format for gathering information, format for conducting analyses, standardized action plan, mechanism for reporting results.
- **Post-Incident Recovery**—Activities designed to restore the department's response capability after an incident, including consideration of staffing assignments, equipment replacement, and cost recovery.
- **Incident Record Keeping and Reporting**—Completion of standard incident documentation, preparation and submission of special incident reports, incident review process, incident follow-up procedures.

- Injury/Exposure Reporting and Investigation—Accident and injury reports, exposure reports, death reports, maintenance of the health data base system, identification of injury/exposure trends and problems, liaison with the community's health care system, member notification and testing, confidentiality of personal health records, exposure/injury follow up.
- Critical Incident Stress Debriefing/Defusing—Situations that indicate a need for CISM, identifying individuals needing CISM, procedures for notifying a qualified debriefing team, conducting a defusing, post-incident follow up.

85 SOP Topic Areas

EMERGENCY OPERATIONS FIRE SUPPRESSION - FIRE SUPPRESSION RISK MANAGEMENT—

Procedures designed to minimize risk to responders and implement aspects of the department's health and safety program at fire suppression incidents.

- Required Use of Personal Protective Equipment (PPE)—Use of turnout gear, SCBA, PASS devices/alarms, and other equipment at fire suppression incidents.
- Rapid Intervention Teams—Procedures for deploying intervention teams during incidents: availability, proper uses, activation, proper uses, standard practices, special situations.
- Evacuation (Firefighters)—Evacuating responders from dangerous structures or areas: determining dangerous conditions, activation signal, procedures for evacuation, accounting for personnel, return to normal operations.
- Air Monitoring—Monitoring carbon monoxide (CO) levels during overhaul, equipment and uses, removal of SCBA.

COMPANY OPERATIONS—Procedures covering activities related to specific company operations.

- Incident Staffing—Number and types of personnel, capability, personal protective equipment, etc. for different types of fire suppression incidents.
- Water Supply—Acquiring and maintaining water supply at fire operations.
- Tanker/Tender Operations—Use of tankers/tenders at fire scenes.
- First-In Engine Operations—Duties and functions of the first-in engine company at a fire scene.
- Second-In Engine Operations—Duties and functions of the second-in engine company at a fire scene.
- Truck Company Operations—Duties and responsibilities of the truck company at a fire or other emergency scene.
- Special Units—Duties and responsibilities of units needed to perform special functions, such as rescue units, cascade systems, lighting units, and grass-fire units.

TACTICAL/STRATEGIC GUIDELINES—Procedures that guide fire and emergency personnel in remediation of fire suppression incidents.

- Incident Size-Up—Conducting incident size-up upon arrival on the emergency scene.
- Automatic Alarms—Responding to and dealing with automatic alarms.
- Offensive and Defensive Operations—Agency operations at emergency scenes, including offensive fire attacks, defensive operations, and how to determine which approach will be taken.
- Apparatus Placement—Placement of apparatus on an emergency scene to ensure safety and effective emergency operations.
- Forcible Entry/Gaining Access—Forcible entry activities, to include lockouts of residences and automobiles and use of lock and/or knox boxes in emergency and non-emergency situations.
- Foam Operations—Use of foam on emergency incidents, including when and how to apply foam.
- Ventilation—Conducting safe and effective ventilation operations.
- Hot/Cold Weather Operations—Operating in hot and cold weather or winter environments.
- Sprinkler/Standpipe Operations—Using standpipes and operating in buildings and residences with sprinkler systems.
- Apartment/Condominium Operations—Operations in apartment buildings or condominiums.
- Commercial Building Operations—Operations in commercial buildings.
- Salvage—Conducting salvage operations at a fire scene.
- Overhaul—Conducting overhaul operations at a fire scene, which may include procedures for evidence and crime scene protection.
- Exposures—Checking and protecting exposures and minimizing exposure risk.

SPECIAL FACILITIES/TARGET HAZARDS—Procedures for response to and operations at special structures or hazards.

- High Rise Operations—Responding to and operating at emergency incidents in high rise buildings.
- Clandestine Drug Labs—Responding to an emergency involving a known or suspected clandestine drug lab, which may include safety factors, law enforcement coordination and evidence preservation.
- Correction Facility Operations—Operating at emergency incidents in correctional facilities which may involve safety for personnel, law enforcement coordination and escorts for personnel.
- Industrial Facilities—Operations at industrial facilities that may involve hazardous materials, large buildings, warehouses, and dangerous machines; includes interfacing with industrial fire brigades or fire departments.
- Other Special Structures—Fire suppression operations at any other special structures (arenas, stadiums, historically relevant structures, airports, schools, market places, etc.).

SPECIAL FIRE SUPPRESSION OPERATIONS—Procedures covering special fire suppression response situations and operations.

- Aircraft Firefighting Operations—Responding to and operating at fire suppression incidents involving aircraft.
- Special Unit Operations—Deployment of special units in fire suppression operations.
- Wildfire Operations—Response to wildfire emergencies.

EMERGENCY OPERATIONSEMERGENCY MEDICAL RESPONSE - EMERGENCY MEDICAL RESPONSE RISK MANAGEMENT—Procedures designed to minimize risk to responders and implement aspects of the department's health and safety program at emergency medical incidents.

- Incident Infection Control—Applicable regulations and standards, rights of patients and responders, personal hygiene and behavior, responder health issues, preparation for response, standard protective measures, special situations, compliance monitoring.
- Protective Clothing and Equipment—Selection, use, and disposal of specialized emergency medical protective clothing and equipment (gloves, masks, protective eyewear, gowns, resuscitation equipment, etc.) based upon specific situations.
- Lifting/Moving Patients—Proper lifting dynamics, proper use of stretchers, special situations (stairways, elevators, etc.).
- Hostile Situations—Approaching emergency incidents, use of body armor, cover and concealment, response to crime scenes, suicidal persons, people with weapons, patient restraints, special situations (snipers, hostages, extremist groups, bombing incidents, etc.).

PRE-HOSPITAL EMS FIRST RESPONSE—Procedures directed at the personnel delivering the first pre-hospital EMS resources to the incident scene.

- Delivery Model—The specific configuration of the first response component: type of vehicle, number of vehicles, staffing of the unit (number and care capability).
- Patient care—General procedures addressing patient care delivered in the pre-hospital setting.
- Treatment Protocols—Medically approved protocols for pre-hospital EMS personnel that ensure consistent and appropriate treatment of patients (includes interaction with Medical Director).
- Medical Devices and Equipment—Selection of types of medical devices and equipment appropriate for field use in the defined scope of practice and treatment protocols.
- Biohazard and General Waste Disposal—Types of hazards and disposal methods, disposal area/facility, segregation of waste products, packaging, labeling, storage, treatment, disposal.

- Clothing/Equipment Decontamination—Methods and appropriate applications, decontamination area/ facility, use of chemical agents, cleaning clothes,

PATIENT DISPOSITION AND TRANSPORTATION—Procedures directed at how the Fire/EMS Organization assures the safe and effective delivery of the patient to the appropriate facility.

- Destination Guidelines—Criteria for triage of pre-hospital EMS patients to specific destinations.
- Method/Mode of Transportation—Methods to determine how pre-hospital EMS patients are transported (i.e., ambulance vs. helicopter).
- Ambulance Operations—Behavior in the patient compartment, securing the patient, situating and securing equipment, standard safety devices and techniques, use of hazardous equipment during transport (starting and IV, defibrillation, etc.)
- Helicopter Operations—Choosing and marking a landing zone, arm signals, crowd control, protective gear, approaching a helicopter, behavior and etiquette during transport, standard safety devices and techniques, use of hazardous equipment during transport.

MANAGEMENT OF EMS OPERATIONS—Procedures directed maintaining organizational readiness to provide emergency medical services in compliance with applicable laws, regulations, and standards.

- Re-supply/Procurement of Supplies—Pre-hospital EMS provider supply and re-supply of expendable medical supplies and medications.
- System Inventory—Determining and accounting for appropriate amounts of medical supplies and medications carried/stored by pre-hospital EMS providers.
- Designation of Treatment Facilities—Coordination with facilities to receive patients.
- Data Collecting and Reporting—Collecting and analyzing pre-hospital EMS system data.
- Quality Improvement System—Using pre-hospital EMS data to evaluate the system and provider performance, to include customer satisfaction and patient care.
- Research and Reporting—Research conducted and reported as the result of a collaborative involvement of the EMS community.
- Standard of Care—Methods to define the minimum level of care based on available resources, accepted performance standards, and local community needs.
- Patient Care Reporting—Minimum data sets for patient care reporting and times when reporting is necessary.
- Patient Documentation and Billing —Minimum data required for patient billing activities, procedures for billing activities and times when data collection is necessary.

SPECIAL EMS OPERATIONS—Procedures covering special emergency medical response situations and operations.

- Mass Gatherings—Event types, planning practices, first aid/EMS services, alternate patient access methods, pre-positioning/staging emergency apparatus and resources, expanding response in an emergency.
- Hazardous Materials Team Medical Monitoring—Use of medical monitoring equipment, pre- and post-entry monitoring, criteria for excluding personnel from operations.
- EMS Operations at Hazmat Incidents—Emergency decontamination of victims and team members, patient care and treatment, transport considerations, personal protective equipment.
- EMS Operations at Technical Rescue Incidents—Pre- and post-entry monitoring for team members, patient care and treatment, transport considerations, personal protective equipment.
- EMS Operations During Disasters—Triage methods, alternate treatment procedures, alternate transport procedures, evacuation of hospitals and medical facilities, mass casualty procedures, interfacing outside medical response teams (Disaster Medical Assistance Teams, medical strike teams, community emergency response teams, etc.), shelter medical procedures, “special needs patient” care, patient decontamination.
- EMS Operations in the Rehabilitation Area/Sector—Criteria for excluding personnel from operations, treatment for emergency service personnel, rehabilitation for emergency service personnel.

EMERGENCY OPERATIONS HAZARDOUS MATERIALS RESPONSE - Standard operating procedures for hazardous materials response are not just for hazardous materials response teams. Fire and EMS departments that respond, or are subject to respond, to any type of incident involving hazardous materials must develop written SOPs. This is a mandatory federal requirement under the Superfund Amendments and Reauthorization Act (SARA) passed in 1986. Both the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) promulgate regulations under SARA Title I, Section 126. OSHA 29 CFR § 1910.120, Hazardous Waste Operations and Emergency Response (commonly known as HAZWOPER) and EPA 40 CFR § 311 are essentially identical regulations applicable to all emergency responders within the United States regardless of their location or status (i.e., as a paid or volunteer employee). These regulations define five training levels for emergency responders based on the functions they may be expected to perform at a hazardous materials incident:

- First Responder Awareness—Individuals likely to witness or discover the release of a hazardous material. Trained to initiate the appropriate response and take no further action.
- First Responder Operations—Respond to releases or potential releases of hazardous substances as part of the initial response. Expected to take defensive actions without trying to stop the release, for the purpose of protecting persons, property, and the environment. (This

is generally considered the minimum acceptable level of training for members of fire and EMS departments.)

- **Hazardous Materials Technician**—Respond to a hazardous materials incident for the purpose of stopping the release. These individuals are often members of a Hazmat team.
- **Hazardous Materials Specialist**—Respond with and support hazardous materials technicians. Possess specialized knowledge of chemical hazards or container characteristics.
- **On-scene Incident Commander**—Assume control of the incident beyond the first responder awareness level. This individual must possess minimum training at the first responder operations level with additional knowledge of state, local, and federal response plans. This appendix identifies SOP topic areas suitable for use by emergency responders trained at the First Responder Operations level. Obviously, a fire or EMS department with members trained and expected to function in an offensive mode (e.g., hazmat technicians or specialists) will require additional SOPs beyond those discussed here.

HAZARDOUS MATERIALS RESPONSE RISK MANAGEMENT—Procedures designed to minimize risk to responders and implement aspects of the department’s health and safety program at hazardous materials incidents.

- **Personal Protective Equipment**—Use of turnout gear, SCBA, PASS devices/alarms, and other equipment at hazardous materials incidents.
- **Hazardous Materials Personal Safety**—Identifying chemical emergencies, incident levels, chemical safety, general precautions for hazardous materials incidents, roadway operations.

Air Monitoring—Procedures for conducting air monitoring at incidents, addressing such factors as methods and action levels for air monitoring.

FIRST RESPONDER OPERATIONS—Procedures defining recommended work practices and response techniques for First Responder Operations personnel.

- **Roles and Actions**—Definition and role of First Responder Operations personnel, explanation of appropriate (defensive) actions during hazardous materials incidents.
- **General Response Procedures/Emergency Response Plan**—Standard hazardous materials response procedures: types of incidents, dispatch criteria, techniques for approaching incidents, isolation of hazard, denial of entry, etc.
- **Recognition and Identification**—Information gathering (container characteristics, shipping papers, markings, labels, etc.), use of reference materials and contacts (e.g., Emergency Response Guide, CHEMTREC), hazard categorization and assessment.
- **Notification**—Reporting requirements, reporting protocols, requesting assistance (hazmat teams, mutual-aid resources, other agencies), incident updates, documentation.

- **Site Management and Scene Setup**—Identification of hazmat incident levels, use of hazard zones and perimeters, location of decontamination area, placement of vehicles and supplies, etc.
- **Emergency Decontamination**—Emergency decontamination of personnel and equipment exposed to hazardous substances: methods of decontamination, decontamination procedures, handling and transporting victims.
- **Defensive Actions**—Procedures for specific First Responder defensive actions (e.g., damming, diking, diversion, using sorbents, application of firefighting foam).

SPECIAL HAZMAT OPERATIONS—Procedures covering special hazardous materials response situations and operations.

- **Operating with Hazmat Teams**—Pre-designated procedures for working with a hazmat team.
- **Public Protection Options**—Procedures for public evacuation or sheltering in-place: decision making, alerting the public, coordinating with law enforcement and community services agencies, initial and secondary evacuation, sheltering in-place, incident termination and re-entry.
- **Environmental Restoration**—Procedures for supporting and monitoring the activities of private remediation or clean-up contractors (may be the responsibility of another agency).

EMERGENCY OPERATIONS TECHNICAL RESCUE - As defined here, Technical Rescue includes emergency response activities designed to locate endangered persons (and sometimes animals), extricate them from entanglements, and remove them from potentially hazardous conditions. Standard operating procedures for emergency patient treatment and transport, often considered part of rescue operations, are covered under Emergency Medical Response. Personnel who perform both roles would be subject to both sets of SOPs.

TECHNICAL RESCUE RISK MANAGEMENT—Procedures designed to minimize risk to responders and implement aspects of the department’s health and safety program at technical rescue incidents.

- **Personal Protective Equipment**—Use of specialized technical rescue personal protective clothing and equipment at incidents.
- **Lock Out/Tag Out**—Procedures ensuring that all electrical and mechanical equipment at or near the rescue site is turned off and physically prevented from being inadvertently turned on.
- **Air Monitoring**—Procedures for conducting air monitoring at rescue incidents, addressing such factors as methods and action levels for air monitoring.

RESCUE OPERATIONS—Procedures that direct activities related to search and rescue operations, including vehicle rescue, agricultural rescue, and extrication from industrial equipment.

- Scene Stabilization—Assessment and control of hazards, stabilization of vehicles involved in motor vehicle accidents, crowd/bystander control.
- Rescue Equipment—Types, use, and protection of specialized rescue equipment.
- General Rescue Operations—Basic procedures for coordinating with other response agencies, locating endangered persons, setting rescue priorities, patient stabilization and protection, performing technical rescue, dealing with relatives/family liaison, etc.
- Rescue Teams—Procedures describing the use, structure, equipment, and operations of special rescue teams (may be a separate document/section from the general standard operating procedures).

SPECIAL RESCUE OPERATIONS—Procedures covering special rescue activities or programs.

- Ice Rescue—Response to and operations during ice rescues; may include specific information about equipment use and maintenance.
- Water Rescue—Response to and operations during surface, swift water, or dive rescues; may include specific information about equipment use and maintenance.
- Confined Space Rescue—Response to and operations during confined space rescue situations; may also include information on equipment use and maintenance.
- Structural Collapse Rescue—Response to and operations during a structural collapse; may also include information on equipment use and maintenance.
- Rope Rescue—Response to and operations during a rope, vertical, or high-angle rescue situation; may include information on equipment use and maintenance.
- Trench and Excavation Collapse—Response to and operations during a trench or excavation collapse incident; may include information on equipment use and maintenance.
- Aircraft Extrication—Extrication of patients from aircraft; may include information on equipment use and maintenance.

EMERGENCY MANAGEMENT/ DISASTER OPERATIONS - Modern society is increasingly vulnerable to man-made and natural hazards. As a result, fire departments over the past decade have become increasingly involved in disaster preparedness and response, also known as Emergency Management. Disaster operations involve responses to incidents that exceed the community's standard emergency service response capabilities. In addition to physically preparing department facilities, apparatus, and personnel for disasters, fire departments typically must undertake non-routine missions and tasks, often under dangerous and demanding conditions. Resource and coordination requirements change and expand. To fulfill their new responsibilities, fire departments must develop SOPs that clarify procedures before such emergencies occur. This section outlines some of those special requirements.

ORGANIZING FOR DISASTER SITUATIONS—Procedures that address modified organizational missions and personnel assignments during disaster operations.

- Disaster Management—Activation of the department’s disaster operations plans and systems: emergency finance and procurement, resource management, personnel, information management, public information, etc.
- EOC Organization—Functional structure of disaster operations to facilitate coordination with other community agencies and federal/state resources, including EOC functions (e.g., use of Emergency Support Function categories), staffing, and operational procedures.
- ICS/EOC Interface—Local response agency coordination, mutual aid organization coordination, EOC/ field communications and documentation.
- Activation Levels—Categories that define organizational mobilization requirements and actions depending on the nature of the emergency.
- Personnel Assignments and Responsibilities—Changes in normal operating assignments and responsibilities to accommodate new disaster missions and responsibilities (family issues, temporary roles, teams, task forces, etc.).
- Personnel Notification Procedures—Steps to locate and assign personnel, both during and after normal work hours in a disaster: communication methods, information conveyed, and procedures for tracking the process and resolving problems.
- Disaster Training—Special systems and procedures to brief and train personnel on new roles, assignments, and work requirements.
- Disaster Preparation—Procedures for securing department facilities and verifying the identity of personnel under disaster conditions; may include procedure for securing responders’ personal residences and families.

DISASTER OPERATIONS RISK MANAGEMENT—Procedures designed to minimize risk to responders and implement aspects of the department’s health and safety program in disaster operations.

- Personal Protective Equipment—Use of turnout gear, SCBA, PASS devices/alarms, and other equipment in disaster operations.
- Disaster Operations Personal Safety—General precautions and procedures for department and responder actions to reduce risk during disaster operations.
- Protection of Facilities and Equipment—Methods to protect fire department facilities, apparatus, and equipment from hazard impacts before and during disaster response.
- Accountability of Personnel—Procedures for monitoring disaster operations and personnel to ensure that tasks are completed safely and effectively.
- Suspending Operations—Designation of conditions in which personnel and apparatus are to remain in/ return to quarters or other safe location; may include notification of the EOC and the public of operational status.
- Member Injuries and Fatalities—Procedures to evaluate and treat member injuries and to document and report injuries and fatalities that occur during disaster operations.

DISASTER OPERATIONS—Procedures providing general guidance for disaster operations, including methods and actions that differ from routine alarm response and coordination with other local, state, and federal disaster agencies and community groups.

- Disaster Operations Centre—Implementing and staffing “area commands” or “fire operations centres,” and integrating field activities with the EOC and other response agencies.
- Adjusted Levels of Response—Changes in standard response strategies and resource levels, including the use of task forces and strike teams.
- Disaster Communications—Changes in standard communication roles, protocols, and procedures to facilitate coordination with outside agencies and groups.
- Response Unit Routing and Placement—Routing and placing equipment and personnel on the disaster scene to reflect the nature and requirements of the emergency situation.
- Damage Assessment—Procedures for rapid damage assessment of response areas immediately following a disaster; may include a more thorough assessment of damage at fire department facilities.
- Specialized Equipment—Identifying, accessing, and operating specialized equipment during disaster situations, including equipment controlled by outside agencies, private sector companies, and members of the public.
- Building Safety Evaluations—Inspection priorities, initial rapid evaluation of damage to individual residential and commercial buildings, building posting classifications, working with building owners.
- Community Emergency Response Teams—Integrating and working with CERTs and other emergent volunteer groups during disasters.
- Mitigation Activities—Actions taken during disaster operations that reduce or eliminate the risk of future incidents: identifying opportunities, assessing options, establishing partnerships and collaborative activities, setting priorities, financing and accounting procedures, implementation and evaluation of activities.
- Curtailing Disaster Operations—Steps for monitoring the disaster situation, evaluating hazards and response requirements, terminating disaster operations, and making the transition to normal operations.

DISASTER-SPECIFIC GUIDELINES - Procedures to address disaster missions and response requirements that are specific to different types of hazards. The need to develop SOPs in this category will vary significantly from community to community depending on potential hazard vulnerability and local comprehensive emergency management plans. Potential hazards that might be addressed include the following:

- Flood/dam break
- Hurricane

- Tornado
- Earthquake/tsunami
- Volcano eruption
- Snow/ice storm
- Drought
- Civil Disturbance
- Mass casualty
- Aircraft crash
- Train accident
- Ship fire/accident
- Terrorism incident
- Explosion
- Gas pipeline incident
- Severe storm
- Building collapse
- Cave-in
- Radioactive material emergency
- Special events (Olympics, dignitary visit, etc.)
- Disease epidemic



**Municipality of Meaford
Report on Performance Measurement
And Benchmarking Program**

JULY 2017



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Executive Summary

In their ongoing efforts for continuous improvement, the Municipality of Meaford has requested a document to help guide them in relation to setting performance measurements that will enhance and improve the fire service that they offer to the citizens of the Municipality.

Performance measurement programs rely on developing baseline and benchmark expectations. Once these criteria have been set, the department is then able to conduct an evaluation of achieved outcomes, versus desired outcomes. For the fire service, some of the desired service related programs to be measured and evaluated include (but are not limited to) fire prevention, fire suppression, training and response times to emergencies.

With this in mind, the focus of this report is to give guidance to the Municipality of Meaford in developing fire service performance measures and identifying benchmarks to meet the future needs of the community in an efficient, effective and cost conscious manner.

Benchmarking, which is also addressed in this document, is the process of measuring and comparing an organization's results against similar programs and services of its peers, established norms and recognized industry standards along with the organization's past performance and projected expectations.

While there is some measuring of performance in relation to fire prevention, public education, training and emergency response, this document will build on these areas and follow up with recommendations on how to improve using these measurements and others.

In order to set minimum standards, this document will review related Provincial and National standards for a baseline for the Municipality to aim for in an annual review for fire service performance, along with recommendations for related benchmarks. As such, this review will culminate into recommendations (with related examples) on what needs to be measured, why and what the benefits of these measurements will be for the Municipality of Meaford.

Recommendations contained in this document include, but are not limited to:

- Adoption of the recommended measurements noted for each section
- Annual review of whether or not the fire services are meeting the goals set
- Utilization of an in-depth check list included in this document to identify other areas for improvement

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Setting of Performance Standards for the Fire Department

Why performance measurement and benchmarking?

They help to answer the following questions:

- What are the specific goals of Municipality?
- What specific outcomes is the Municipality aiming for?
- How will the fire services know if they are achieving them?

- How well should the fire services be doing based on industry standards?
- How are the fire services doing versus its peers?
- How can they improve?
- How will the fire services know they are doing better?

When setting standards for the fire service, the fire department(s) should start off by reviewing its Mission Statement and Goals and Objectives. These statements set the foundation for what the department wants to accomplish. By doing this, it also gives much more meaning and credibility to the noted statements.

There are seven key purposes to measuring the performance of a fire service, they are:

1. To evaluate the effectiveness of the department's programs and services
2. To control the outputs, such as staffing hours and costs for the services being provided
3. To allow for more accurate budgeting based on the programs being delivered to the community
4. To motivate staff in meeting the goals of the department
5. To promote needed improvements for the fire service
6. To celebrate the meeting of the goals and benchmarks set by the department
7. To learn from the process on how to improve on a continuous cycle

One key point to note is that to make them practical, performance measurements must be Specific, Measureable, Attainable, Realistic and Time Bound (SMART). By doing this, the department has in place a set of goals that anyone in the fire department can relate to and understand the need for such measurements. This also accomplishes buy-in from the members of the fire service(s) because the goals are realistic.

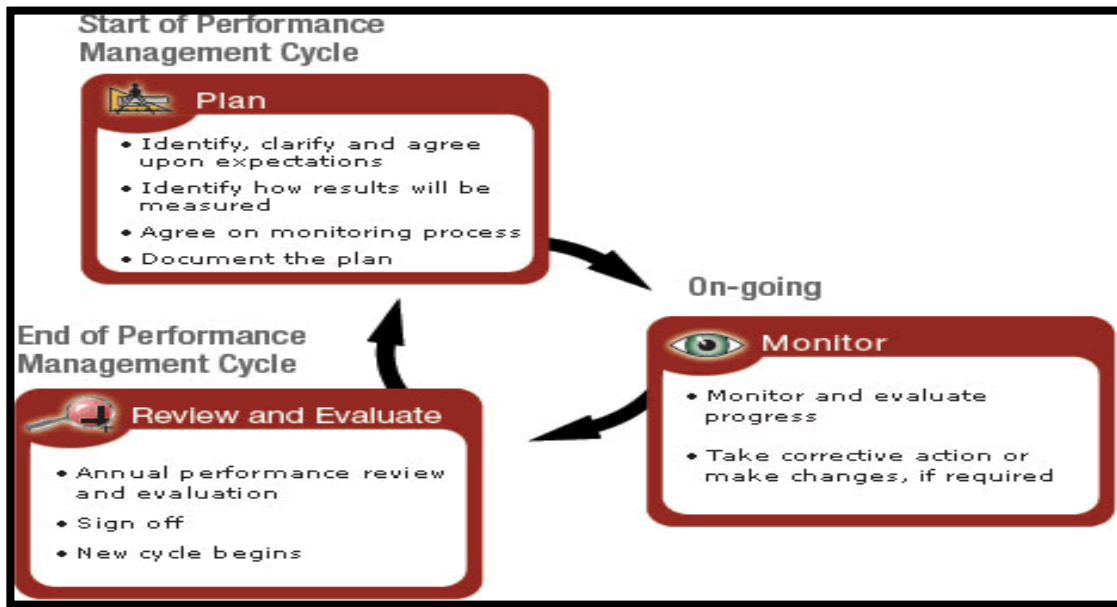
But the setting of these measurements is just the beginning. They must become part of the department's culture and part of an annual review cycle to ensure that they are effective and meeting the needs and expectations of the department. This annual review cycle encompasses the use of a performance management process as noted in figure 1.

For ease of reference, the areas for measurement have been broken into the following headings:

- 1.1 Emergency Response Performance Measurements
- 1.2 Training
- 1.3 Fire Prevention
- 1.4 Vehicles and Equipment
- 1.5 Finance – Dollar Saved vs. Dollar Lost Ratio and Cost Per Capita
- 1.6 Human Resources

There are numerous areas that can also be measured but, as previously noted, the focus of this program is to measure what will add value to the fire service and allow for comparison with other departments to confirm opportunities for improvement.

FIGURE 1: Example of a Performance Management Review Cycle



Based on the information noted in Figure 1, this cycle is an ongoing initiative that will require reviews and adjustments over time, as needed.

To assist with the implementation and review of the performance standards, the following industry related documents and recommended measurements should be utilized; The Office of the Fire Marshal and Emergency Management (OFMEM), the National Fire Protection Association (NFPA), the Commission on Fire Accreditation International (CFAI) and the Fire Underwriters Survey (FUS) Organization. These can be further broken down into the following documents:

- NFPA – 1201, recommended practices for developing a fire department
- NFPA – 1710, recommended standards for career fire departments
- NFPA – 1720, recommended standards for volunteer fire departments
- OFMEM – Simplified Risk Assessment
- The Fire Underwriters Survey (FUS)
- CFAI – Self Assessment Manual
- CFAI – Standards of Coverage Manual

**“Fire Departments need a
balanced set of
Performance Measures –
To identify both lead and lag
indicators”**

What are “lead and lag” indicators? Quite simply, this equates to measures that identify whether or not the fire service(s) is leading the (volunteer fire) industry in certain areas, meeting the required areas or is lagging behind. Based on its findings, the fire service(s) must evaluate where they are and how identified improvements can be implemented.

In order to accomplish this, the fire service(s) needs to look at what industry standards and/or Council expectations and mandates are in place. Based on these related documents, a general baseline can be set.

Section 1:

Industry Standards

Section 1: Industry Standards

Although this document has already noted several standards to consider when setting performance measurements, there are two key standards setting bodies that exist for the fire service in Ontario. They are the National Fire Protection Association (NFPA) standards and the Office of the Fire Marshal and Emergency Management (OFMEM).

The three key NFPA documents that many fire departments refer to are:

- NFPA 1201 – Recommended standard for the development of a fire department
- NFPA 1710 – Recommended standard for Career Fire Departments
- NFPA 1720 – Recommended standard for Volunteer Fire Departments

For the OFMEM, there are many related guidelines and documents that will be referred to as needed within this paper. However, some of the guidelines are:

- Operational Planning: An Official Guide to Matching Resource Deployment and Risk
- Volunteer Firefighter Recruitment and Retention
- Fire Station Location
- Conducting a Simplified Risk Assessment

1.1 Emergency Response Performance Measurements

Fire suppression and emergency response services are among the four key programs that the fire service can offer to its community. As such, this is also an area that sets many basic performance standards such as:

- Identified response standards for career and volunteer fire departments
- Amount of staff required to be on the scene of an incident within a set time
- Fire suppression operations
- Emergency medical response
- Technical response

The Municipality's establishing and regulating by-law does not make note of a response time criteria.

When setting such response goals, it must be kept in mind that there are other industry recommended standards (such as NFPA) that recommend baselines for tracking. If the Municipality is not comfortable with using these industry standards, then there is also the opportunity to utilize its past three years of response averages and 80th percentiles as its baseline and work towards improving them based on the response time goals set by the fire chief and Council.

No matter what type of benchmark is preferred by the Municipality, it would be advisable to present a "response time standard" to Council for approval as a benchmark for the department to aim for.

As noted in the two charts below, there are different expectations identified based on whether a

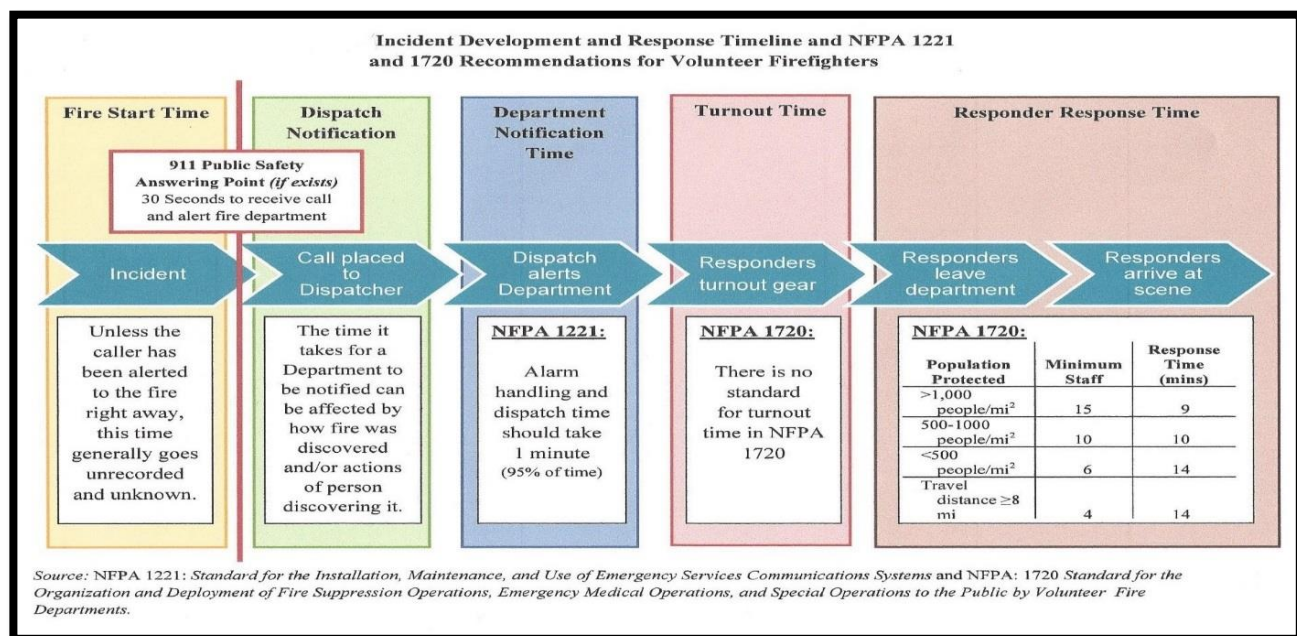
fire department is career or volunteer based. At the present time, the municipality utilizes volunteer based fire departments which are defined as:

- “A fire department having volunteer emergency service personnel comprising 85 percent or greater of its department memberships (NFPA 1720).”

As such, the Municipality should endeavour to utilize the noted NFPA 1720 standard which recommends that 6 firefighters should be on scene within 14 minutes of receiving the page out of the call (for a house fire situation) 80% of the time.

The Municipality, at 11,000 and a land mass of 588 square kilometers has 19 people per square kilometer (48 people / square mile). In the core area of the town the Municipality may wish to set the standard at 10 firefighters in 10 minutes based on the high density community.

FIGURE #1: National Fire Protection 1720 Recommendation for Volunteer Firefighters



Note: For information purposes; the Office of the Fire Marshal and Emergency Management no longer produces a guideline in relation to response times. An older document (that has been removed) did support and recommend the “10 firefighters in 10 minutes” standard.

For this specific section, the Municipality will need to set a baseline for the following key areas:

1. Expected response time of volunteers from notification (paging) to arrival at the fire station
2. Expected response travel time from fire station to the scene of the incident (arrival of the first unit able to provide suppression for fire calls)
3. Amount of staff required for specific response types (i.e. house fire, motor vehicle collision and medical calls)

4. Based on whatever baseline that is set by the Municipality, how are the fire departments meeting and/or exceeding this measurement
5. In relation to medical calls, how many times is the fire service arriving on scene before the ambulance service (EMS)
6. How can it improve in any areas that it is failing to meet its targeted goals

Examples of tracking and measuring response times and related charts can be found in Section 2 of this document.

1.2 Training

Without a proper training program that is based on the department's Establishing and Regulating By-law expectations and industry standards, it is difficult to identify what needs to be delivered and measured.

The Municipality of Meaford Establishing and Regulating By-law schedule B identifies the following "core fire services":

- Fire suppression
- Auto extrication/rescue
- Grass and brush firefighting
- Mutual and Automatic Aid
- Water/Ice rescue water entry
- Public Assistance
- Ambulance (EMS) assistance
- Police assistance
- Public utilities assistance
- Community emergency plan participation
- Pre-fire planning
- Role as Assistant to Fire Marshal re suppression
- Other emergencies at the discretion of the Fire Chief or designate

Based on this list, the training officer must ensure that all staff involved in such responses are trained to effectively deal with such incidents. This training would also include training on any associated equipment used for such responses. The training measurements would include how many firefighters are trained and competent in each area, how many training sessions are occurring each year, and the number of firefighters attending the sessions.

The measurement must be broken down into a more specific set of "what" courses and certifications will be delivered and why? Also, if the set number of courses is not met then how will the department ensure that the missing courses are covered in a timely manner?

Another area that needs to be measured in relation to training is the cost per staff hour, whether that be through in-house training delivered by the fire service training officer or company officers;

the cost of bringing outside trainers in or the cost of sending staff to “off-site” courses.

For this specific section, fire service(s) will need to set a baseline for the following key areas:

1. Programs being delivered by the fire department and the related mandatory and non-mandatory training requirements (based on related standards)
2. A breakdown of training time required for the volunteers and how these training hours can be attained through monthly and annual training schedules
3. The options available for “catch up” training if members miss any mandatory training
4. Completion of an annual report by the training officer to identify what was covered and what still needs to be addressed
5. The driver training being accomplished with new and present volunteer firefighters and whether there is a program in place to identify where department collisions are most occurring and what related training needs to be implemented
6. WSIB related incidents/injuries - Are these being tracked and are the mitigation efforts to reduce injuries being incorporated into the department’s training programs?

Examples of tracking and measuring training programs and related charts can be found in Section 2 of this document.

1.3 Fire Prevention

Of the three lines of defense identified by the Office of the Fire Marshal and Emergency Management, fire prevention and code enforcement are at the top two areas of focus. The three lines of defense are:

1. **Fire safety education**
2. **Enforcement of standards and related fire codes**
3. Efficient and effective emergency response

As already noted, for the fire prevention division their programs would fall under the first two areas of education and enforcement. Being that fire prevention is a very technically demanding area, training and certification of identified staff to carry out these duties is required. The level of training would depend on the tasks assigned to the individual(s).

Another area for tracking is the type and amount of properties to be inspected within a calendar year. For most volunteer fire departments, the fire prevention division is geared towards conducting inspections by request and complaint only. This is simply due to the level of qualified staff available to do this job.

Many fire services measure the following fire prevention related initiatives:

- Target number of fire inspections will be...

- The Department will increase the number of homes visited under the Alarmed for Life Program to... The target for homes with smoke alarms will be increased to ...% and ...% for CO alarms
- The number of station tours and education sessions will be Combined
- residents will be reached with education programming and safety reminders will be distributed

These noted measurements are of value but how and why are these quotas being set and what if the organization does not meet the quotas set?

For this specific section, the Municipality will need to set a baseline for the following key areas:

1. Fire prevention programs that must be delivered based on OFMEM requirements
2. Fire safety education programs that must be delivered based on OFMEM requirements
3. Programs that the department has identified as needing to be delivered based on their Simplified Risk Assessment recommendations
4. A breakdown of the staffing hours (and associated costs) required to meet the delivery of these programs, along with what actual resources are available within the department to deliver the programs
5. The development and tracking of a formal industrial/commercial inspection program that is based on priorities
6. The development of a residential inspection program and resources available to deliver this program

Examples of tracking and measuring fire prevention programs and related charts can be found in Section 2 of this document.

1.4 Vehicles and Equipment

To ensure that a fire department is able to meet its emergency response objectives, it must have a fleet of vehicles and related equipment that are dependable and ready to respond at a moment's notice.

The NFPA recommends that all front line fire department vehicles be replaced at the 15 year stage. These vehicles can then be put into the reserve/back up positions for another five years. This standard is also recognized by the Fire Underwriters organization as noted in the following chart.

Apparatus Age	Major Cities ³	Medium Sized Cities ⁴ or Communities Where Risk is Significant	Small Communities ⁵ and Rural Centres
0 – 15 Years	First Line	First Line	First Line
16 – 20 Years	Reserve	2 nd Line	First Line
20 – 25 Years ¹	No Credit in Grading	No Credit in Grading Or Reserve ²	No Credit in Grading Or Reserve ²
26 – 29 Years ¹	No Credit in Grading	No Credit in Grading Or Reserve ²	No Credit in Grading Or Reserve ²
30 Years ¹	No Credit in Grading	No Credit in Grading	No Credit in Grading
6. All listed fire apparatus 20 years of age and older are required to be service tested by a recognized testing agency on an annual basis to be eligible for grading recognition (NFPA 1071) 7. Exceptions to age status may be considered in small to medium sized communities and rural centre conditionally, when apparatus condition is acceptable and apparatus successfully passes required testing 8. Major cities are defined as an incorporated or unincorporated community that has: - a populated area (or multiple areas) with a density of at least 400 people per square kilometre; AND - a total population of 100,000 or greater. 9. Medium Communities are defined as an incorporated or unincorporated community that has: - a populated area (or multiple areas) with a density of at least 200 people per square kilometre; AND - a total population of 1,000 or greater. 10. Small Communities are defined as an incorporated or unincorporated community that has: - no populated areas with densities that exceed 200 people per square kilometre; AND - does not have a total population in excess of 1,000.			

Although there is no actual law that dictates when a fire pumper truck must be retired, the point here is that the longer the vehicle is kept in service the less dependable it can become. Maintenance and reliability must be closely monitored with older vehicles to ensure reliability.

For this specific section, the fire services will need to set a baseline for the following key areas:

1. Overall life expectancy of the vehicle and date for retirement/sale based on recommended industry standards
2. Overall cost per vehicle based on life expectancy
3. How does this equate to cost per kilometer or hour of service

4. Based on maintenance costs, is the present life expectancy set for fire department vehicles cost effective or are adjustments required
5. In relation to department equipment, tracking of the larger cost (capital items such as Self Contained Breathing Apparatus and firefighter's bunker (firefighting) gear) should be tracked and budgeted for that specific year for replacement
6. Annual costs for servicing/testing of such equipment to identify areas of concern relating to life vs. cost of equipment

At this time, it does not appear that the departments are measuring cost per call or hour of use when factoring the cost of a fire truck coupled with cost of fuel and maintenance. Although this performance measure does not directly reflect the overall efficiency of the fire service(s), it does help to demonstrate the annual cost of running a vehicle associated with its age.

There is no actual standard that recommends a targeted cost per vehicle goal. This is more of an exercise in relation to tracking of costs and being able to report to Council and the community that the fire department is doing all it can do in relation to cost containment.

1.5 Finance – Dollar Saved vs. Dollar Lost Ratio and Cost Per Capita

Fire services should be measuring dollars saved vs. dollar lost ratio. By doing this, the department is looking at related fire loss reductions that can be contributed to better prevention education initiatives, more effective response efforts or even more fire suppression systems installed in facilities within the Municipality.

Along with this type of “saved vs. loss” ratio, it is also worth keeping track of such things as:

1. Cost per-capita for fire services within the response area. This will demonstrate to the community how their costs compare to similar size fire departments and Municipalities
 - a. If changes in this are occurring from year to year, why?
2. Staffing costs related to all sections, such as training, fire prevention, injuries/downtime and overtime.
 - a. How does this relate to each fiscal year?
3. Monitoring of the “dollar saved vs. dollar lost” ratio from year to year

1.6 Human Resources

Human resources is the largest and most important resource for any organization. As such, this resource needs to be protected and an identified staffing level also needs to be ensured. For Volunteer fire departments, recruitment and retention is an ongoing challenge due to many reasons, such as:

- Jobs available in the community
- Career opportunities outside of the community
- Daily challenges for the volunteers such as family life and job expectations

Under this section, there is an opportunity to look at and evaluate:

1. Recruitment and retention – how to keep the department’s numbers to approved level and retain the volunteers
2. Staffing needs of the fire department – based on present status and future growth of the community
3. Needs of the volunteers in relation to benefits and other support needs such as EAP programs
4. Monitoring of on duty injuries and when/where they occur – e.g. training, fire call, medical call, etc.

1.7 Conclusion and Recommendations

The Municipality of Meaford has opportunity to more closely monitor the efficiency and effectiveness of the fire services and related initiatives. By adopting the recommendations and related spreadsheets noted within this report, the Municipality will be able to take their performance measurement program to the next level.

To assist the department with conducting a review of the fire service programs, a performance measurement checklist has also been included in Appendix “B”. This checklist will offer the Municipality an in-depth comparison as to what is being measured and what needs to be measured.

To ensure that this performance measurement program is effective, it must become part of the fire departments’ culture and everyday order of business. By doing so, the fire services will be able to demonstrate that they are in fact embracing their mission, vision and values in relation to serving the community and at the same time supplying their staff with the required training and necessary tools to do their job in an effective, safe and efficient manner.

Section 2:

Examples of Performance Measurement Tracking Spreadsheets

Section 2: Examples of Performance Measurement Tracking Spreadsheets

2.1 Master Spreadsheet

Performance Measurement Tracking Spreadsheet Master Spreadsheet						
Topic	Goal - Year	Actual Outcome – Year	Variance	Improvement Plan	Time Line for Implementation	Actual Outcomes
<i>Response Times (Sample Only)</i>	<i>11 Min 00 Sec Average time</i>	<i>12 Min 10 Sec</i>	<i>1 Min 10 Sec</i>	<i>Identify station with response time issues and or equipment/staffing concerns to be addressed</i>	<i>Review for 2017 and implement identified fixes in 2018</i>	<i>N/A at this time.</i>
Emergency Response						
Fire Prevention						
Training						
Vehicles and Equipment						
Finance						
Human Resources						

2.2 Emergency Response Spreadsheet

Performance Measurement Tracking Spreadsheet Emergency Response Spreadsheet						
Topic	Goal - Year	Actual Outcome – Year	Variance	Improvement Plan	Time Line for Implementation	Actual Outcomes
<i>Response Times (Sample Only)</i>	<i>11 Min 00 Sec Average time</i>	<i>12 Min 10 Sec</i>	<i>1 Min 10 Sec</i>	<i>Identify station with response time issues and or equipment/staffing concerns to be addressed</i>	<i>Review for 2017 and implement identified fixes in 2018</i>	<i>N/A at this time.</i>
1. Expected response time of volunteers from notification (paging) to arrival at the fire station						
2. Expected response travel time from fire station to the scene of the incident						
3. Amount of staff required for specific response types (i.e. house fire, motor vehicle collision and medical calls)						
4. Based on whatever baseline that is set by the department, how is it meeting and/or exceeding this measurement						
5. In relation to medical calls, how many times is the fire service arriving on scene before the ambulance service (EMS)						
6. How can it improve in any areas that it is failing to meet its targeted goals						

2.3 Training Spreadsheet

Performance Measurement Tracking Spreadsheet Training Spreadsheet						
Topic	Goal - Year	Actual Outcome – Year	Variance	Improvement Plan	Time Line for Implementation	Actual Outcomes
<i>Training programs</i>	<i>35</i>	<i>29</i>	<i>6</i>	<i>Identify training dates for catch up sessions for 2018</i>	<i>2018</i>	<i>N/A at this time.</i>
1. Programs being delivered by the fire department and the related mandatory and non-mandatory training requirements (based on related standards)						
2. A breakdown of training time required for the volunteers and how these training hours can be attained through monthly and annual training schedules						
3. What options are available for “catch up” training if members miss any mandatory training						
4. Completion of an annual report by the training officer to identify what was covered and what still needs to be addressed						
5. What driver training is being accomplished with new and present volunteer firefighters and is there a program in place to identify where department collisions						

are most occurring and what related training needs to be implemented						
6. In relation to WSIB related incidents/injuries, are these being tracked and are the mitigation efforts to reduce injuries being incorporated into the department's training programs						

2.4 Fire Prevention/Education Spreadsheet

Performance Measurement Tracking Spreadsheet Fire Prevention Spreadsheet						
Topic	Goal - Year	Actual Outcome – Year	Variance	Improvement Plan	Time Line for Implementation	Actual Outcomes
<i>Inspections</i>	<i>180</i>	<i>185</i>	<i>+5</i>	<i>None required</i>	<i>N/A</i>	<i>N/A</i>
1. Fire prevention programs that must be delivered based on OFMEM requirements						
2. Fire safety education programs that must be delivered based on OFMEM requirements						
3. Programs that the department has identified as needing to be delivered based on their Simplified Risk Assessment recommendations						
4. A breakdown of the staffing hours (and associated costs) required to meet the delivery of these programs, along with what actual resources are available within the department to deliver the programs						
5. The development and tracking of a formal industrial/commercial inspection program that is based on priorities						
6. The development of a residential inspection program and resources available to deliver this program						

2.5 Vehicle and Equipment Spreadsheet

Performance Measurement Tracking Spreadsheet Vehicle and Equipment Spreadsheet						
Topic	Goal - Year	Actual Outcome – Year	Variance	Improvement Plan	Time Line for Implementation	Actual Outcomes
<i>Vehicle – pumper 21</i>	<i>20 year life</i>	<i>23 years kept</i>	<i>3</i>	<i>Identify any negatives relating to keeping vehicle longer than life cycle</i>	<i>2018 to review</i>	<i>Recommendations for life cycle adjustment if required.</i>
1. Overall life expectancy of the vehicle and date for retirement/sale based on recommended industry standards						
2. Overall cost per vehicle based on life expectancy						
3. How does this equate to cost per kilometer or hour of service						
4. Based on maintenance costs, is the present life expectancy set for fire department vehicles cost effective or are adjustments required						
5. In relation to department equipment, tracking of the larger cost (capital items such as Self Contained Breathing Apparatus and firefighter's bunker (firefighting) gear) should be tracked and budgeted for that specific year for replacement						

6. Along with annual costs for servicing/testing of such equipment to identify areas of concern relating to life vs. cost of equipment						
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2.6 Finance Spreadsheet

Performance Measurement Tracking Spreadsheet Finance Spreadsheet						
Topic	Goal - Year	Actual Outcome – Year	Variance	Improvement Plan	Time Line for Implementation	Actual Outcomes
<i>Cost per Capita</i>	<i>\$12 per capita</i>	<i>\$12 per capita</i>	<i>0</i>	<i>N/A</i>	<i>N/A</i>	<i>Continue to monitor and find efficiencies where possible</i>
1. Cost per-capita for fire services within (response area) Township. This will demonstrate to the community how their costs compare to similar size fire departments and Townships						
a. If changes in this area are occurring from year to year, why and what is the plan to adjust if able						
2. Staffing costs related to all sections, such as training, fire prevention, injuries/ downtime and overtime.						
a. how does this relate to each fiscal year						
3. Continued monitoring of the “dollar saved vs. dollar lost” ratio from year to year						

2.7 Human Resources Spreadsheet

Performance Measurement Tracking Spreadsheet Human Resources Spreadsheet						
Topic	Goal - Year	Actual Outcome – Year	Variance	Improvement Plan	Time Line for Implementation	Actual Outcomes
<i>Recruitment target for 2014 (Sample Only)</i>	<i>20</i>	<i>15</i>	<i>-5</i>	<i>- more aggressive recruitment program - utilization of volunteers from other station</i>	<i>Continue recruitment program for all of 2018</i>	<i>N/A at this time.</i>
1. Recruitment/retention – how to keep the department's numbers to approved level and retain the volunteers						
2. Staffing needs of the fire department – based on present status and future growth of the community						
3. Needs of the volunteers in relation to benefits and other support needs such as EAP programs						
4. Monitoring of on duty injuries and when/where they occur – e.g. training, fire call, medical call, etc.						

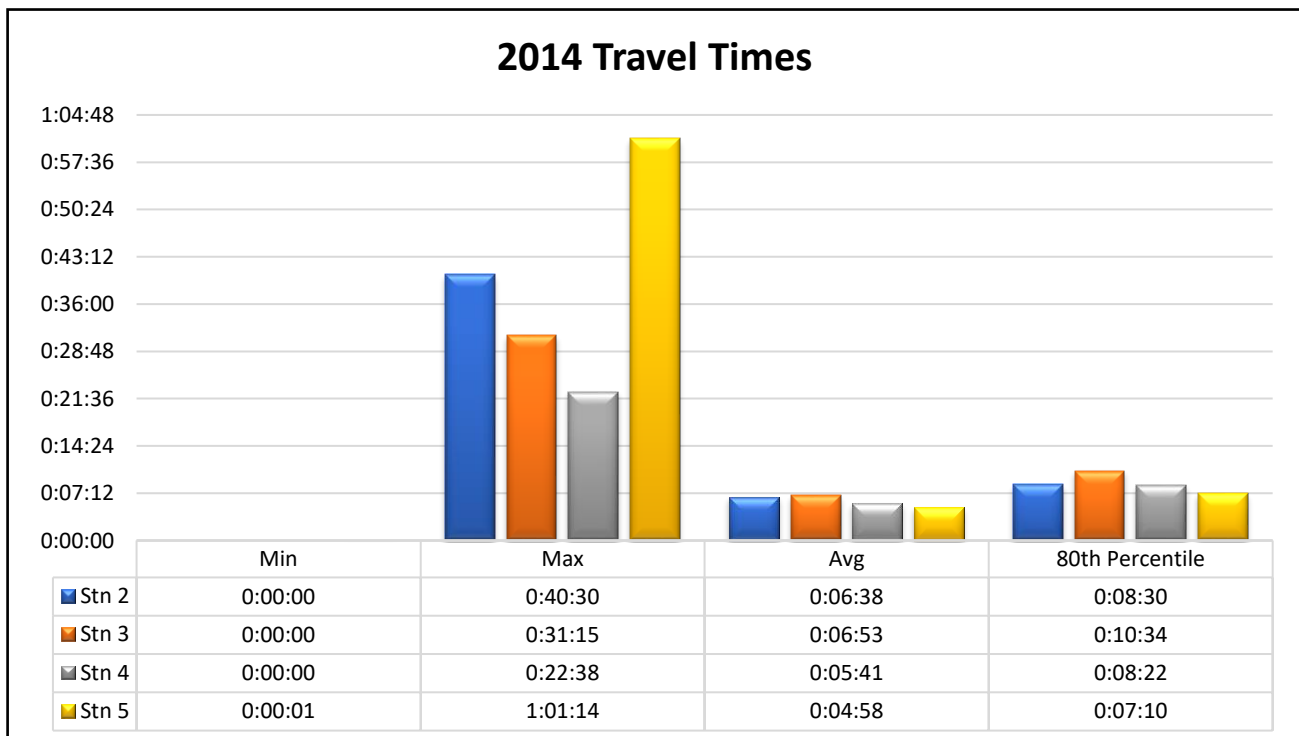
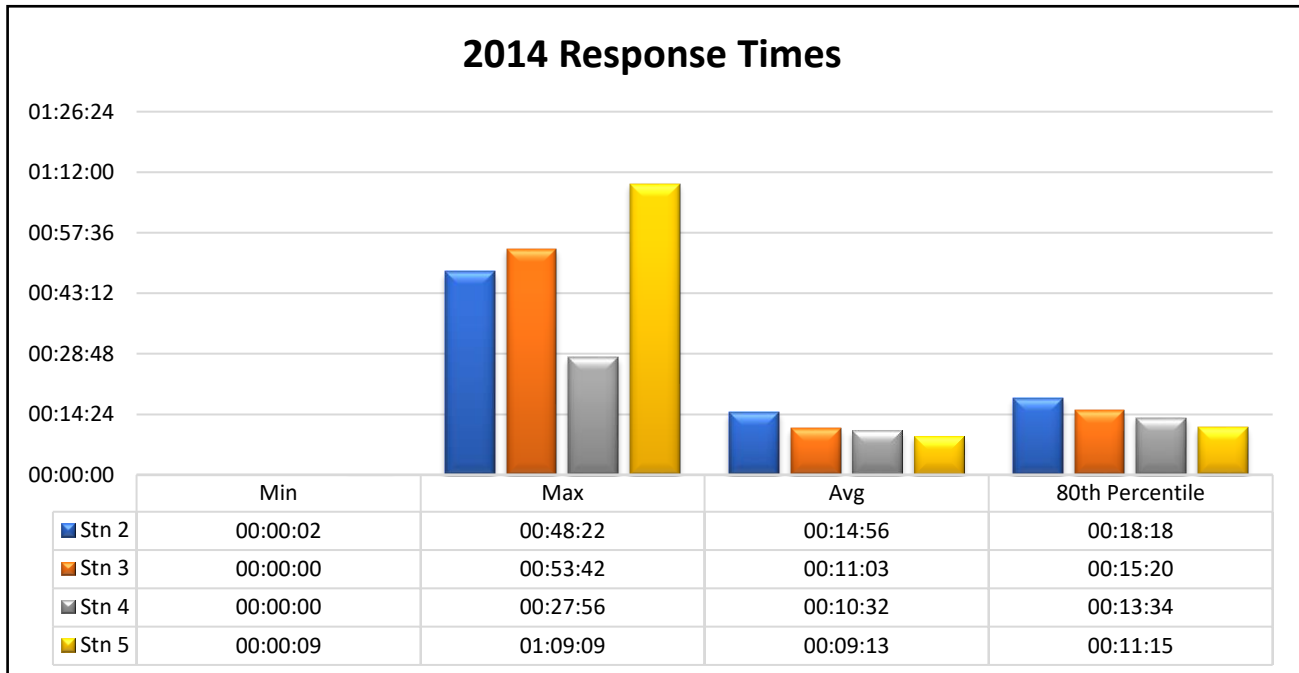
Section 3:

Examples of Performance Measurement Topics and Charts

Section 3: Examples of Performance Measurement Topics and Charts

3.1 Example of Response Times

The following two charts are examples of charts used to report to Council. Whether an industry standard is utilized, or a Council approved response expectation is set, the tracking of response times will allow the department to identify the improvements made in relation to response times along with any areas that need attention.



3.2 Example of an Annual Training Report Submitted by Another Fire Department

Review of Year

Over the course of the past year, more than xxxxx hours of training were logged through the delivery of new training programs along with the quarterly maintenance training schedule. It is worth noting that there has been a xx% increase in training hours from the previous year's report in which xxxxx hours were logged.

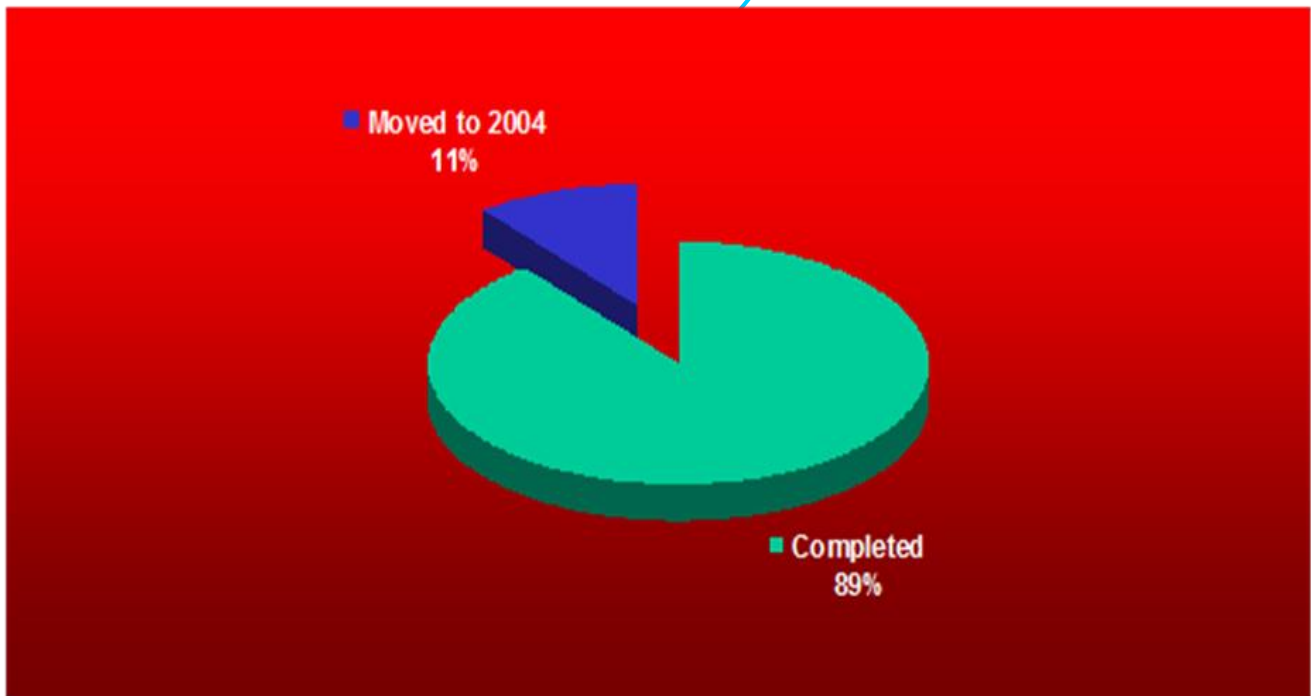
Of the xx main topics identified in the annual training calendar xx were completed, giving us an xx% completion rate for the year. The following list notes what was completed and what programs have been rescheduled for the next year.

The Training Division was able to complete the following programs:

1. Live fire training at XXXXX training facility
2. Introduction of the new SCBA
3. Introduction of the new Thermal Imaging Cameras
4. Training on the new Aerials
5. Review SCBA training on emergency operations and cleaning and maintenance
6. Annual face fit test for all personnel who are required to wear SCBA
7. All ARFF related live fire practicals, exams and review training
8. The EMR (emergency medical responder) program was launched
9. Ice/water rescue review training for all platoons
10. WHMIS review training for all platoons
11. "Back to Basics" training for the crews in which crew lectures and practicals were reintroduced
12. Computer training, conducted by the on-shift trainers
13. Performance management program for all personnel
14. Confined space awareness training
15. Introduction of the new aerial manual
16. Personal protective equipment inspections and review of related SOPs
17. Area familiarization – streets review

The only programs that required rescheduling into the next year are the driving related topics:

- In-class defensive driving course
- The practical sessions on vehicle handling
 - For this program, a performance measurement would be comparing the increase in driver training to the number of collisions and damage reports – the goal would be to see a decrease in collision/damage reports



Live fire, SCBA programs, Thermal Imaging Cameras, New Aerials, ARFF, EMR, Ice/water rescue, Confined space, computer training, performance management, PPE inspections, Face fit testing and WHMIS.

3.3 Fire Prevention Programs

The following is a recommended three-step process (by the Officer of the Fire Marshal and Emergency Management) on setting up a fire prevention/inspection program.

Step 1: Conduct a Needs Analysis to create an accurate picture of the fire risk in your community in such a manner that they can be effectively targeted.

Step 2: Effective programs need to be selected that are appropriate to address the risk and that fall within the resources that the community can assign to the problem. Once selected, these programs must be developed and implemented.

Step 3: Evaluate the success of the selected programs in achieving their stated objectives and in reducing the targeted risk. Evaluation of fire prevention programs will enable the fire service to make improvements to its programs, demonstrate program values and allow it to re-allocate available resources as the targeted risks are reduced. Evaluation is an essential and continual process.

Inspections

Information should be gathered to demonstrate that the program has:

- Achieved compliance with fire safety legislation
- Reduced the impact of fire on inspected properties
- Been responsible, in whole or in part, for fire loss reductions
- Prevented fires

Public Safety Education

Information should be gathered to demonstrate that a program has:

- Increased fire safety knowledge
- Improved occupant knowledge and fire safety behaviour and that these improvements reduced the impact of the evaluated fires
- Been responsible, in whole or in part, for fire loss reductions
- Identified potential fire incidents which were prevented as a result of public fire safety education
- Been responsible, in whole or in part, for a reduction in false alarms

3.4 Vehicles

Since fire department vehicles are replaced on a specific cycle of 15 to 20 years, depending on the community and the vehicle itself, the question of tracking vehicle costs sometimes comes into question. However, the value of tracking overall maintenance costs of the fleet can help to identify vehicle types and designs that appear to be more cost effective than others. This in itself is a valid reason for tracking overall vehicle costs.

The following chart is an example of a standard for vehicle replacement for different size communities.

Apparatus Age	Major Cities ³	Medium Sized Cities ⁴ or Communities Where Risk is Significant	Small Communities ⁵ and Rural Centres
0 – 15 Years	First Line	First Line	First Line
16 – 20 Years	Reserve	2 nd Line	First Line
20 – 25 Years ¹	No Credit in Grading	No Credit in Grading or <i>Reserve</i> ²	No Credit in Grading or <i>Reserve</i> ²
26 – 29 Years ¹	No Credit in Grading	No Credit in Grading or <i>Reserve</i> ²	No Credit in Grading or <i>Reserve</i> ²
30 Years ¹	No Credit in Grading	No Credit in Grading	No Credit in Grading

11. *All listed fire apparatus 20 years of age and older are required to be service tested recognized testing agency on an annual basis to be eligible for grading recognition (NFPA 1071)*
12. *Exceptions to age status may be considered in a small to medium sized communities and rural centre conditionally, when apparatus condition is acceptable and apparatus successfully passes required testing*
13. *Major cities are defined as an incorporated or unincorporated community that has:*
 - a. *a populated area (or multiple areas) with a density of at least 400 people per square kilometre; AND*
 - b. *a total population of 100,000 or greater.*
14. *Medium Communities are defined as an incorporated or unincorporated community that has:*
 - a. *a populated area (or multiple areas) with a density of at least 200 people per square kilometre; AND*
 - b. *a total population of 1,000 or greater.*
15. *Small Communities are defined as an incorporated or unincorporated community that has:*
 - a. *no populated areas with densities that exceed 200 people per square kilometre; AND*
 - b. *does not have a total population in excess of 1,000.*

For sections relating to 1.5 finance, and 1.6 human resources these sections, along with the previous sections have already been encapsulated into a charts in section #2 for easier reference.

Appendix “A”

Sample of a Performance Measures Summary Report

Appendix A – Sample of a Performance Measures Summary Report

Fire and Emergency Services Measures	Results	Action Plan and/or Revised Performance Measures
The 20xx dollar saved vs. dollar lost ratio will be x.xx% The 20xx Departmental 80% percentile response time target will be xx minutes and xx seconds. The average number of responding day time Firefighters will be xx for all single station responses and xx for all structure fires.	\$xxxxxxx vs. \$xxxxxxx = x.x% 80% percentile response time = xx minutes xx seconds Single station = xx Structure fire = xx	We finished the year x% below our target. This was largely in part due to the xxxx fire in xxxx (\$xxxxxxx loss). Our annual percentage (excluding the xxxx fire was x.xx (x.xx% above our target). We were slightly below our target for staffing at single station and structure fire responses. We will monitor the response of staff over the next 6 months.
The 20xx target for fire inspections will be xxx.	# of Inspections completed to date = xxx	After making a revision to the 20xx fire inspection target (xxx) we are satisfied that our new target is an achievable target.
The Department will increase the number of homes visited under the Alarmed for Life Program to xxx. The target for homes with smoke alarms will be increased to xx% and xx% for CO alarms. The number of station tours and education sessions will be xx combined	# of homes visited for Alarmed for Life Program = xxx % of homes with working smoke detector = xx% % of homes with working CO alarm = xx% # of station tours / public education sessions completed = xx	The number of homes with working smoke alarms is approaching the target of xx%; however, the CO alarm target fell short. With the new CO alarm laws we will be proactively focusing our efforts on educating the public about CO safety and the associated laws.

Fire and Emergency Services Measures	Results	Action Plan and/or Revised Performance Measures
xx residents will be reached with education programming and xxx safety reminders will be distributed. Through education the number of fire permits will increase improving compliance levels and reducing the number of violations.	# of persons reached with education programming = xxxx # of safety messages distributed = xxxx # of fire permits issued = xxxx	Our new targets for education programming and safety reminders will be set at xxxx and xxxx respectively. We believe that this is achievable with our current public education budget moving forward. We saw an increase in the number of recreational fire permits in 20xx while seeing a slight decrease in the number of open air permits.
The number of training courses/certifications will be xx during 20xx.	# of training courses / certifications = xx	Not as many training courses were able to be offered in late 20xx due to the mandatory change over to the NFPA standards.

Appendix “B”

Performance Measurement Checklist for Fire Departments

Appendix B - Performance Measurement Checklist for Fire Departments

Checklist of Performance Measures

1. Action: Assess Risks and Develop Long-Range Plans

These performance measures relate to the need for assessing the risks of fire and other emergencies in the response area and developing long-range plans for the fire department based on the identified risks and on community resources.

Measure	Yes	No
A. Has the fire department written a long-range strategic plan that looks out at least three years into the future? The plan should be based on a risk analysis of the response area and contain (1) financial and strategic planning for personnel, apparatus, and fire stations and (2) contingency plans to guarantee service in the event of a disaster or large scale emergency.		
B. Are fire stations sufficient in number and located in areas that permit the fire department to respond to all points within its response area in an acceptable response time for 80 to 90 percent of the calls? (One NFPA rule of thumb for response times is 8 minutes from receipt of alarm to when an initial attack team is on the scene; for volunteer, non-staffed stations, the rule of thumb is about 12 minutes.)		
C. For fire departments in areas with municipal water systems, has the fire department been involved and satisfied with the process for planning and providing water supplies for fire protection in the response area?		
D. Has the FUS credit for water supply been maintained at or improved to acceptable levels (the credit includes measures of fire flow capacity, hydrant spacing, water storage and pumping capacity)?		
E. Do all fire pumper apparatus properly match local road conditions and local firefighting pumper performance needs (such as gallon/litres per minute ratings, tank capacities and discharge rates, hose and nozzle loads)?		
F. Does the fire department have a replacement plan for capital purchases that provides for future acquisitions and estimates the expected replacement year of apparatus based on their projected life cycles and costs?		
G. Are the fire department's capital expenditures per capita over the past ten years at or below the median for similar departments in the region (or, alternatively, within acceptable levels in the community)?		
H. Does the fire department have a systematic process of determining road and firefighting performance requirements that can be used in developing bid specifications for purchasing department vehicles?		

2. Action: Evaluate Fire Department Performance and use Resources Cost-Effectively

The following performance measures relate to evaluating the fire department's response activities and its overall performance over time. They also refer to the extent of the fire department's involvement with mutual aid activities and examination of alternative service-delivery mechanisms.

Measure	Yes	No
A. Does the fire department take steps throughout the year to evaluate the effectiveness and efficiency of its activities?		
B. Does the fire department keep a log of on-scene activities at emergency incidents?		
C. Does the fire department maintain an information system (such as a computer program or regularly updated manual system) to record and retrieve information on fire department activities?		
D. Does the fire department conduct post incident analyses and debriefings following emergency responses to identify what to either change or reinforce in future responses?		
E. Has the fire department developed a formal program of setting goals and objectives and measuring its progress toward meeting those goals?		
F. Has the fire department used alternative means of purchasing apparatus (pumpers, ladder trucks, tankers, grass rigs, other vehicles) such as acquiring vehicles either jointly with another fire department, or via bids developed in collaboration with other fire departments?		
G. Are the fire department's total expenditures per capita at or below the median for similar departments in the region (or, alternatively, within acceptable levels in its community)?		
H. Are the fire department's total expenditures per emergency response at or below the median for similar departments in the region (or, alternatively, within acceptable levels in its community)?		
I. For those responses made within acceptable response times, are the fire department's number of work hours spent per incident, and the expenditures per incident, at or below the median for other fire departments responding to similar incidents?		
J. Does the fire department participate in a mutual aid association and, if so, does it conduct joint operations using standard operating guidelines agreed to by participating departments?		
K. Are all of the fire departments' active members familiar with mutual aid procedures, equipment, standard operating guidelines, and safety measures?		
L. Does the fire department and its mutual aid association offer interagency training on an ongoing basis?		

M. Has the fire department and its mutual aid association agreed on a standard approach to incident command?		
N. Has the fire department designated radio frequencies and standard radio procedures for interdepartmental communications with those departments for whom mutual aid is commonly provided?		
O. Has the fire department and its mutual aid association agreed to operate with written agreements that address: incident command responsibility, jurisdictional issues, and standardized communications systems and protocols?		
P. Is the fire department satisfied with its ability through mutual aid to: receive access to additional fire fighters; coordinate fire fighters from multiple departments; get access to apparatus or equipment from other departments; allow for effective communication; and provide quick, effective response to its requests for aid?		
Q. Does the fire department participate with its mutual aid association in: educating the public about fire safety, making cooperative purchases of equipment, jointly using specialized equipment or apparatus and facilities, investigating fires, and providing other specialized services?		

3. Action: Promote Public Awareness of Fire Safety

These indicators measure fire departments' activities regarding public education on fire safety.

Measure	Yes	No
A. Are the fire department's fire-safety awareness efforts based on local fire risks and hazards it identified in the community?		
B. Are the fire department's fire-safety messages targeted to specific audiences?		
C. Does the fire department conduct activities in conjunction with the annual Fire Prevention Week in October?		
D. Does the fire department collaborate with local teachers and school administrators on fire education programs?		
E. Does the fire department use public education materials and literature available from other sources, such as the OFMEM's available materials and other organizations such as the NFPA's "Learn Not to Burn," a safe-escape house owned by another department or group, etc.?		
F. Does the fire department provide fire-safety materials in languages other than English if they are spoken within the community?		
G. Does the fire department monitor its education programs on an ongoing basis to determine their effectiveness?		
H. Has the fire department designated a fire-safety public education officer who coordinates education programs and who meets professional qualifications (such as those specified by the OFMEM and/or the NFPA 1035, <i>Standard for Professional Qualifications for Public Fire and Life Safety Educator</i>)?		
I. Does the fire department use a variety of media to convey fire-safety messages and use other community organizations as partners in delivering the messages?		
J. Does the fire department's education program include activities with businesses, such as instructing employees on fire-safety practices?		
K. Does the fire department offer voluntary fire safety surveys for private residences?		
L. Does the fire department participate in an intervention program to prevent repeat behavior by juvenile fire setters?		
M. Does a high percentage of the population in the fire department's response area receive fire safety messages on an ongoing basis?		
N. Is the fire department satisfied with the quality of the services provided for public fire safety awareness?		
O. Is the rate of fire incidents per capita at or below the median rate for similar communities in the region?		

P. Is the number of fire fighter work hours spent on fire-safety education activities at or above the median hours for similar fire departments in the region (or, alternatively, within acceptable levels in its community)?		
Q. Are the fire department's expenditures per capita on fire safety education at or below the median for similar departments in the region that have reached a high percentage of their populations with fire prevention messages (or, alternatively, within acceptable levels in the community)?		

4. Action: Ensure Fire Code Enforcement

The measures below help evaluate the effectiveness and efficiency of ensuring fire-code inspection and enforcement.

Measure	Yes	No
A. Do a high percentage of the buildings covered by the fire code receive inspections by the fire department within a time cycle established locally?		
B. Do the fire department inspectors set code inspection priorities among life-safety hazards and property hazards in the community?		
C. If directly involved with code inspections, has the fire department established job performance requirements for its inspectors, and does it offer training in line with professional qualifications (such as those specified by the OFMEM and/or the NFPA 1031, <i>Standard for Professional Qualifications for Fire Inspector</i>)?		
D. If directly involved with code inspections, does the fire department evaluate inspectors based on their performance, including scheduled field checks to assess the quality of inspections performed?		
E. If directly involved with code inspections, do fire department fire-code inspectors routinely gather pre-fire planning information to share with other fire fighters for use when responding to fires?		
F. If directly involved with code inspections, do fire department fire-code inspectors emphasize educating building owners on fire safety as well as enforcing code provisions?		
G. If directly involved with code inspections, do fire department fire-code inspectors participate in preconstruction meetings, review construction plans for compliance with fire codes, participate in the sign-off for construction permits and certificates-of-occupancy, and coordinate reviews with local building officials and design professionals?		
H. If directly involved with code inspections, does the fire department retain records of all inspections and their dispositions for at least three years or in relation to the organization's records retention guidelines?		
I. Does the fire department consult with a fire protection engineer, when necessary, for plan reviews, interpretations, and variances (through a staff fire protection engineer, by contract, or the OFMEM)?		
J. Does the fire department work to ensure that code violations are corrected within a reasonable time after providing initial notice of the violations?		
K. Is the fire department satisfied with the quality of fire-code inspection and enforcement activities?		
L. Is the rate of fires low in occupancies inspected for fire-code provisions within a locally set time cycle?		

5. Action: Develop Effective Communications Systems

The following measures relate to fire departments' communication abilities and systems. They apply to communication within the department, and they apply to communication between the department and individuals and organizations outside it.

Measure	Yes	No
A. Is the fire department satisfied with its system for alerting members to respond to an incident?		
B. Is the fire department satisfied with the ability of its communications system (telephones, radio base station equipment, two-way radios, pagers, etc.) to perform without excessive delays or interference in emergencies as well as in normal daily activities?		
C. Is the fire department's communication system adequate to allow emergency responses to fires, EMS calls, and other incidents within acceptable response times?		
D. Is the fire department satisfied with the ability of its communications system to transmit and receive information between incident commanders and department members and among mutual aid departments?		
E. Does the fire department use standard operating guidelines for radio communications with common terminology and integrated radio frequencies?		
F. Does the fire department include a written description of its communications system with standard protocols for transmitting messages in its incident management system and response plans (which are drawn up in advance of actual emergencies)?		
G. Does the fire department have access to mobile command units or similar arrangements to provide a central emergency communications point for prolonged incidents?		
H. Does the fire department actively and regularly communicate with others outside the department, which may include local elected officials, utility companies, fire-related associations, law enforcement, local water and building agencies, and school officials?		

6. Action: Prepare a Competent Work Force and Support Safe Operations

The following measures relate to fire fighter recruitment and retention, training, and personal protective equipment. They also refer to necessary procedures and guidelines for safety.

Measure	Yes	No
A. For fire departments with volunteer or on-call members, has the fire department's recruitment process provided it with a sufficient number of on-call or volunteer members located within an area that allowed them to promptly respond to calls?		
B. For fire departments with volunteer or on-call members, does the fire department consistently receive an adequate number of volunteer or on-call members responding when contacted for incidents?		
C. For fire departments with volunteer or on-call members, does the fire department have a high retention rate of its active members?		
D. For fire departments with volunteer or on-call members, does the fire department identify what encourages members to continue and what causes them to resign through means such as formally surveying members, conducting exit interviews when they opt to resign, or consistently following procedures designed to help members resolve problems?		
E. For fire departments with volunteer or on-call members, does the fire department provide recognition to members for jobs well done (in newsletters, at banquets, etc.)		
F. For fire departments with volunteer or on-call members, does the fire department maintain a good reputation and positive image to keep members interested (such as maintaining apparatus in prime condition as a point of departmental pride)?		
G. For fire departments with volunteer or on-call members, does fire department leadership consistently exhibit a management style that encourages member participation?		
H. For fire departments with volunteer or on-call members, has the fire department stated an explicit mission and goals so members know what to expect?		
I. For fire departments with volunteer or on-call members, does the fire department follow a process for communicating relevant information so members stay informed about department business?		
J. For fire departments with volunteer or on-call members, does the fire department consistently follow procedures to deal equitably with grievances?		

K. For fire departments with volunteer or on-call members, does the fire department require training that is relevant and fits volunteers' time availability to the extent possible?		
L. For fire departments with volunteer or on-call members, does the fire department offer incentives in the form of monetary compensation, medical or disability benefits, or retirement or pension plans?		
M. Has the fire department developed a recruitment program based on its identified ongoing personnel needs?		
N. Is the fire department satisfied that its recruitment process produces candidates able to perform the required duties?		
O. Does the fire department offer or require training that prepares members in all areas of service in which they are expected to perform and that is based on the types of risks in the response area?		
P. Does the fire department offer or require ongoing training in any specialized services that fire fighters perform, such as hazardous materials responses or emergency medical services?		
Q. Does the fire department identify the training needs of individual members and ensure they receive the training to support those needs?		
R. Has the fire department designated training officers, and does it maintain fire fighter training records?		
S. Does the fire department measure the effectiveness of the training offered or assess members' proficiency after receiving training?		
T. Is the fire department satisfied with its members' understanding of department standards for training and operations?		
U. Is the fire department satisfied with the availability of training facilities for various training and drills, including use of ground ladders, live smoke and fire operations, and apparatus operation?		
V. Does the fire department follow written protocols describing safety procedures designed to limit the risk of exposure to infectious and hazardous substances during responses?		
W. Does the fire department provide to all personnel adequate personal protective equipment designed for the tasks they are expected to perform?		
X. Does the fire department offer or require training on the use and limitations of personal protective equipment?		
Y. Does the fire department designate a safety officer at all incidents?		
Z. Does the fire department designate a health and safety officer to manage the department's safety program?		
AA. Does the fire department require physical examinations and periodic medical exams for members on active duty?		
BB. Does the fire department follow a system for monitoring the whereabouts of fire fighters during incidents and has it developed rapid intervention protocols to assist injured fire fighters?		

CC. Does the fire department require that only trained and qualified fire fighters drive and operate department apparatus?		
DD. Do fire department members have access to stress debriefing following critical or traumatic incidents?		
EE. Is the fire department's ratio of fire fighter injuries to incidents at or below the median of similar fire departments in the region (or, alternatively, within acceptable levels in the community)?		
FF. Is the training offered or required by the fire department adequate to allow fire fighters to respond to emergencies within acceptable response times?		

7. Action: Plan for On-Scene Responses

The following measures relate to the advance planning and activities required to operate successfully at emergency incidents. They also include measures for fire investigations and maintenance of equipment and apparatus.

Measure	Yes	No
A. Does the fire department have an incident command/management system that details department roles and activities during fire suppression and other emergency incidents? The incident management system should include: designation of incident commander and other roles for completing functions at the scene, standard operating guidelines for radio and other communication, plans for interagency coordination, and provisions for managing reserve personnel and equipment. Further, all fire fighters should be trained in the incident command/management system, and it should be periodically reviewed and updated.		
B. Does the fire department have written standard operating guidelines for fire suppression as well as any other emergency service its members may be expected to perform?		
C. Do the fire department's standard operating guidelines include provisions for: designating an incident commander and other on-scene duties, maintaining the predetermined minimum number of fire fighters for effective operations, accounting for fire fighter whereabouts and conducting search and rescue on the fire ground, resting fire fighters during operations (rehab), ongoing communications, using available water supplies, overhaul and salvage or mop up, and recording and reporting information.		
D. For fire departments providing rescue services, emergency medical services, hazardous materials management, or other specialized services, has the fire department: assessed the risks and target hazards in the response area for those services? Written emergency response plans describing department responsibilities and members' roles during responses? Consistently maintained the number of fire fighters required to effectively provide the response? Developed pre-incident plans for responding to target hazards and identified risks?		
E. Does the fire department have contacts with adequately trained and equipped personnel to conduct rescues, emergency medical services, hazardous materials management, or other specialized services, if the department does not itself provide these services?		
F. Has the fire department written, and periodically updated, pre-incident plans for the targeted fire risks and hazards in its response area?		

G. Do the fire department's pre-incident plans for fire suppression contain the following information: identification of fire risks and hazards; current maps with roads, and means of access and egress; building floor plans, site plans, or maps of specific hazards; location of on-site fire control equipment; occupancy information for high-hazard buildings; fire flow needs, hydrant locations, and primary and back-up water supplies; lists of cooperating agencies and contact names; and lists of reserve personnel and equipment and mutual aid resources.		
H. Does the fire department use a preventive maintenance program for its apparatus and equipment with routine, scheduled maintenance in accordance with manufacturers' recommendations?		
I. Does the fire department's preventive maintenance program include the following: providing routine maintenance following a set checklist (checking fluid levels, tire pressure, etc.), keeping complete records of repairs and service; conducting inspections of apparatus and equipment within 24 hours of their use; making regular service tests on pumper engines and other apparatus; maintaining a system of inventory control for equipment; scheduling and budgeting for replacing equipment as needed; and conducting regular service tests of ground ladders, hoses, and other equipment?		
J. Does the fire department's preventive maintenance program complete 100 percent of the maintenance scheduled within a year?		
K. Does the fire department have adequate protective clothing and self-contained breathing apparatus for its fire fighters, including personal equipment such as portable radios for fire fighters?		
L. Does the fire department have an adequate personal alert safety system or alternative to warn others when a fire fighter is incapacitated or there is a need to evacuate a structure?		
M. Does the fire department have adequate hose for standard attack and large diameter hose?		
N. Does the fire department have adequate extrication tools, hydraulic tools, torches, and hand tools for cutting, striking, and prying?		
O. In areas with limited water supplies, does the fire department have adequate year-round water drafting sites, portable pumps, and portable drop or folding water tanks?		
P. Are the fire department's equipment and advance planning adequate to allow fire fighters to respond to emergencies within acceptable response times?		
Q. For fire investigations, does the fire department have predetermined guidelines for when to contact the department's fire investigator and/or the Fire Marshal's Office?		
R. Has the fire department established fire investigation guidelines for conducting scene examinations and documenting scenes, interviewing		

witnesses, conducting post-incident investigations, and presenting analyses and findings?		
S. Does the fire department offer or require ongoing training for investigators in investigation methodology, fire protection technology, and current fire code requirements?		
T. Does the fire department offer or require instruction for firefighters in: aspects of arson scenes, how their actions impact the work of investigators, and cautionary measures they can take in suppression, overhaul, and salvage to aid the investigation?		
U. Is the fire investigator on the scene immediately after the fire was extinguished (if not before) for a high percentage of fire investigations?		
V. Is the fire department satisfied with the quality of fire investigation activities?		

Appendix H – Contract Support Information Report



**Municipality of Meaford
Meaford and District Fire Department**

**Contract Support
Information Report**

JULY 2018



**Emergency
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Project Consultants

Although several staff at Emergency Management and Training were involved in the collaboration and completion of this report, the overall review was conducted by:

- Darryl Culley, President Emergency Management and Training Inc.
- Richard Hayes, Fire & Emergency Services Consultant

Together, the team has amassed a considerable amount of experience in all areas of fire and emergency services program development, review, and training. The EMT team has worked on projects that range from fire service reviews, creation of strategic and fire master plans and development of emergency response programs for clients.

Introduction

When conducting a review of contractual fire protection agreements, the Municipality of Meaford should consider for inclusion the concepts and details outlined in this report. The principles outlined below follow the Three Lines of Defence. The Three Lines of Defence is a conceptual outline that enables decision makers to align the services offered in the most appropriate manner and provide the necessary financial support to ensure success.

The Three Lines of Defence include:

- Line one: Public fire safety education
- Line two: Fire safety standards and enforcement
- Line three: Emergency response

This report is constructed around these three lines outlining specific needs within each section. If incorporated into an updated agreement, and the local Establishing and Regulating By-Law, the Municipality will ensure it will receive and provide the best services for the residents of the municipality. Including these points in an agreement will additionally ensure the services provided are current with the legislated requirements.

A review of the municipality's Establishing and Regulating By-Law, incident history, and any current agreements, will provide insight as to what level of service the residents are currently enjoying. A review of the new regulations, outlined within this document, will provide further insight as to what services should be maintained, enhanced, or ceased. The Public Fire Safety Guidelines, whilst under review, also provide a good source of information for service levels. These can be found here, http://www.mcscs.jus.gov.on.ca/english/FireMarshal/FireServiceResources/PublicFireSafetyGuidelines/PFSGIndex/PFSG_Index.html

The main legislation that drives the fires services is the Fire Protection and Prevention Act (FPPA). The current Act can be found on e-laws at this location:

Currently, there are eight regulations that form under this Act. These are:

O. Reg. 379/18	<u>FIREFIGHTER CERTIFICATION</u>
O. Reg. 378/18	<u>COMMUNITY RISK ASSESSMENTS</u>
O. Reg. 377/18	<u>PUBLIC REPORTS</u>
O. Reg. 365/13	<u>MANDATORY ASSESSMENT OF COMPLAINTS AND REQUESTS FOR APPROVAL</u>
O. Reg. 364/13	<u>MANDATORY INSPECTION - FIRE DRILL IN VULNERABLE OCCUPANCY</u>
O. Reg. 425/11	<u>FORMS</u>
O. Reg. 213/07	<u>FIRE CODE</u>
O. Reg. 407/97	<u>APPOINTMENT OF ARBITRATORS AND CONCILIATION OFFICERS</u>

It must be noted that there may be changes to some of these regulations as the new government implements new lenses to which it will view them.

Public Fire Safety Education

It is understood that the Municipality of Meaford is not content with the current levels of service provided in relation to Public Fire Safety Education. ‘An ounce of prevention is worth a pound of cure’. As the Municipality is aware, providing emergency response is costly, therefore, providing additional resources into Fire Prevention and Public Education will pay dividends. Those involved in Public Fire Safety Education must comply with the new regulation O. Reg. 379/18.

The Regulation, in respect to the training for Public Education, is outlined below. The Table 1 is referenced within the text of the of Regulation.

Table 1
Mandatory Certification
(*highlights, bolding, and underlines added for focus*)

Item	Column 1 Fire protection service	Column 2 Certification standard
1.	Develop, implement or deliver a public education program and supporting materials	NFPA 1035 , “Standard on Fire and Life Safety Educator, Public Information Officer, Youth Firesetter Intervention Specialist and Youth Firesetter Program Manager Professional Qualifications”, 2015 Edition, Chapter 4, Level I

4. (1) A certification standard set out in item 1, 2, 3, or 4 of **Table 1** does not apply with

respect to a firefighter who,
(a) became a firefighter before July 1, 2019; and
(b) performed the fire protection service that the standard corresponds to before July 1, 2019.

4. (3) A certification standard set out in item 1, 2 or 3 of **Table 1** does not apply with respect to a firefighter that both of the following criteria apply to:

Note: On January 1, 2020, subsection 4 (3) of the Regulation is amended by striking out “item 1, 2 or 3” in the portion before paragraph 1 and substituting “item 1, 1.3, 2, 3, 5 or 6”. (See: O. Reg. 379/18, s. 5 (1))

1. The firefighter became a firefighter before July 1, 2019.

2. The firefighter’s fire chief was given permission by the Fire Marshal to issue the firefighter a Letter of Compliance with NFPA Standards respecting the relevant standard under Fire Marshal’s Communiqué 2014-04, “Transition to NFPA Professional Qualifications Standards: Grandfathering Policy”, which is dated January 2014 and available on a website of the Government of Ontario.

4. (4) A certification standard does not apply with respect to a firefighter who, prior to July 1, 2019, was certified to an earlier version of that standard.

4. (5) If subsection (3) or (4) provides that a certification standard does not apply with respect to a firefighter, that firefighter is deemed to be certified to that standard for the purpose of clause 3 (1) (b).

The Municipality of Meaford should conduct an audit of their existing firefighters training related to Public Fire Safety Education to determine their level and request the same of any contracted area. Those who will be conducting the Public Fire Safety Education will be required to meet the Regulation and be trained or experienced appropriately. If grandfathered into this certification, appropriate paperwork should be in place. Being trained in the full program and achieving certification will provide the firefighters with the necessary tools to conduct the Public Fire Safety Education in a meaningful way. According to the Regulation, those involved in this activity will have to ensure they meet the ‘certification’ requirements by January 1, 2019. If this level of service is contracted, Council should be assured that those conducting the education are appropriately certified in accordance with O. Reg. 379/18, FIREFIGHTER CERTIFICATION. If this level of service is maintained by the Municipality then the same would apply.

Fire Safety Standards and Enforcement

The Municipality should consider who will be responsible for compliance with the Fire Safety Standards and Enforcement. Should this be a contracted service or should the Municipality of Meaford maintain this responsibility? This is a more complex file as there are a series of requirements and obligations that the Fire Chief/Chief Fire Official has within both the Fire Protection and Prevention Act, and the Fire Code. If the Fire Safety Standards and Enforcement services are contracted out, clear delineation of authority will be required within the contract. If

the Municipality chooses to contract this service, it is recommended that the final draft of the agreement be vetted by the Program Specialists within the Office of the Fire Marshal prior to being signed.

Whether contracted or not, as an Assistant to the Fire Marshal, the Fire Chief and/or Fire Prevention Officer(s) (FPO) will be required to have certifications as outlined in the regulation under the Fire Protection and Prevention Act, 1997, being ONTARIO REGULATION 379/18, FIREFIGHTER CERTIFICATION. This training will be further outlined below. Operational Guidelines will be required to direct the FPO so that consistent practices are followed within the Municipality. If contracted, these SOGs should be the same within the contracted area and those areas maintained by the Municipality, in order to provide a consistent level of service throughout the Municipality. A review of O. Reg. 365/13: MANDATORY ASSESSMENT OF COMPLAINTS AND REQUESTS FOR APPROVAL, will provide the information on what are the minimum requirements, being that of request and complaint inspections. If there are Vulnerable Occupancies within the Municipality, it is required, whether contracted or not, to comply with O. Reg. 364/13: MANDATORY INSPECTION - FIRE DRILL IN VULNERABLE OCCUPANCY. These minimum Regulations should form part of the service delivery within any contracts for service and the Establishing and Regulating By-Law.

Those involved in Fire Prevention Inspections or Plans Examination activities must comply with the new regulation O. Reg. 379/18.

The Regulation, in respect to the training for Fire Prevention Inspections and Plans Examination, is outlined below. The Table 1 is referenced within the text of the of Regulation.

Table 1
Mandatory Certification
(highlights, bolding, and underlines added for focus)

Item	Column 1 Fire protection service	Column 2 Certification standard
Note: On January 1, 2020, Table 1 to the Regulation is amended by adding the following items: (See: O. Reg. 379/18, s. 5 (2))		
1.3	Fire prevention inspections or plans examination activities	NFPA 1031 , "Standard for Professional Qualifications for Fire Inspector and Plan Examiner", 2014 Edition, Level I

4. (1) A certification standard set out in item 1, 2, 3, or 4 of **Table 1** does not apply with respect to a firefighter who,

(a) became a firefighter before July 1, 2019; and

(b) performed the fire protection service that the standard corresponds to before July 1, 2019.

4. (3) A certification standard set out in item 1, 2 or 3 of **Table 1** does not apply with respect to a firefighter that both of the following criteria apply to:

Note: On January 1, 2020, subsection 4 (3) of the Regulation is amended by striking out "item 1, 2 or 3" in the

portion before paragraph 1 and substituting “item 1, **1.3**, 2, 3, 5 or 6”. (See: O. Reg. 379/18, s. 5 (1))

1. The firefighter became a firefighter before July 1, 2019.
2. The firefighter’s fire chief was given permission by the Fire Marshal to issue the firefighter a Letter of Compliance with NFPA Standards respecting the relevant standard under Fire Marshal’s Communiqué 2014-04, “Transition to NFPA Professional Qualifications Standards: Grandfathering Policy”, which is dated January 2014 and available on a website of the Government of Ontario.
4. (4) A certification standard does not apply with respect to a firefighter who, prior to July 1, 2019, was certified to an earlier version of that standard.
4. (5) If subsection (3) or (4) provides that a certification standard does not apply with respect to a firefighter, that firefighter is deemed to be certified to that standard for the purpose of clause 3 (1) (b).

The Municipality of Meaford should conduct an audit of their existing firefighters training related to Fire Prevention Inspections or Plans Examination to determine their level and request the same of any contracted area. Those who will be conducting the Fire Prevention Inspections or Plans Examination will be required to meet the Regulation and be trained or experienced appropriately. If grandfathered into this certification, appropriate paperwork should be in place. According to the Regulation, those involved in this activity will have to ensure they meet the certification requirements by January 1, 2020.

Emergency Response

Preparation for Emergency Response

In order to ensure that the resources are in place to provide a level of service expected by the Council of the Municipality of Meaford, expectations for capital spending should be incorporated into any agreement, and within the Municipality. This could be as simple as indicating the age of responding apparatus and equipment. According to Fire Underwriters Survey for an area like Meaford, frontline pumpers and tankers should have a 20-year life expectancy. Frontline apparatus older than 20 years would run the risk of increased insurance premiums for those being serviced. There are many considerations to factor when delving into what the Municipality can offer to minimize the insurance premiums of their residents. That is outside the focus of this report. It can be said that a minor amount of taxation can offset the insurance premiums considerably.

In an agreement, there should be provision that spells out what type of apparatus should be responding to cover the contractual area. Information, such as, a minimum response of 1 Pumper and 1 Tanker, both under 20 years of age, carrying over 2000 imperial gallons (9092 liters) of water and staffed with 10 firefighters for certain call types. If more or less apparatus is required for different calls types, then wording to that end should be incorporated.

If the current agreement allows the contracted fire department to not respond if they are busy in their own area, provision within the Municipality of Meaford will be required to cover the

gap. If this wording is in place, this may contribute to added increase to the insurance rates of those in the contracted area. If, in fact, the Municipality of Meaford is expecting to augment the response of the contracted department with their own Fire Department, then the agreement should be drafted as an Automatic Aid Agreement and not as a Fire Protection Agreement. An Automatic Aid Agreement, as defined in the FPPA, would be for emergency responses and provide a clear understanding of what level of services are provided by the contracted department, along with what the Municipality of Meaford will provide. In general, Automatic Aid Agreements within Ontario have a retainer fee in the range of \$6,000-\$10,000 and a per call fee (MTO rates per apparatus). There are a few that are higher, these range up and into the \$20,000s. Further information on an Automatic Aid Agreement is below in the Administration section.

Maintenance

There is a rich history of firefighters maintaining their equipment. This adds to pride and ownership and increases the morale and culture within the ranks. There is a purpose behind this maintenance. It is not advisable to arrive at a fire to find that equipment is broken and will not work. This has the potential to increase fire loss and expose the Municipality to litigation. Regular maintenance is necessary to ensure that when all equipment is called up it can function as designed. Age can also be a factor so replacement schedules for various pieces of equipment should be in place. The age of apparatus has already been addressed above. Some other examples of equipment lifespans are, solid state electronics, which have a lifespan of approximately 5 years and can be stretched to 7 years in less use areas, with batteries being replaced every 2 years. Small engines, which have a lifespan of approximate 10 years and can be stretched in less use areas.

Regardless of the equipment and its respective lifespan, regular maintenance is key to successful response. A detailed replacement and maintenance schedule would be required.

Firefighter Training

New Regulations under the Fire Protection and Prevention Act do, and will continue to, impact the required training that a firefighter must have if conducting certain operations and/or supervisory functions. This regulation under the Fire Protection and Prevention Act, 1997, is ONTARIO REGULATION 379/18, FIREFIGHTER CERTIFICATION which articulates what is required and when.

The Municipality of Meaford first has to consider what level of service is required for their own maintained area and the contractual area covered, before determining the level of training that firefighters should have. This is a necessary step so that the level of training can be determined and compliance with the new regulations can be achieved.

The Regulation, in respect to the training for Fire Suppression Activities, is outlined below. The

Table 1 is referenced within the text of the of Regulation.

Table 1
Mandatory Certification
(notes, highlights, bolding, and underlines added for focus)

Item	Column 1 Fire protection service	Column 2 Certification standard
<u>2.</u>	Fire suppression activities, if the level of service provides for <u>exterior attack</u> only	NFPA 1001, "Standard for Fire Fighter Professional Qualifications", 2013 Edition, Level I
<u>3.</u>	Fire suppression activities, if the level of service provides for <u>exterior and interior attack</u>	NFPA 1001, "Standard for Fire Fighter Professional Qualifications", 2013 Edition, Level II
<u>4.</u>	<u>Pump operations</u>	NFPA 1002, "Standard for Fire Apparatus Driver/Operator Professional Qualifications", 2017 Edition, Chapter 5
Note: On January 1, 2020, Table 1 to the Regulation is amended by adding the following items: (See: O. Reg. 379/18, s. 5 (2))		
<u>5.</u>	<u>Supervise other firefighters</u>	NFPA 1021, "Standard for Fire Officer Professional Qualifications", 2014 Edition, Level I
<u>6.</u>	<u>Training</u> courses for fire protection services	NFPA 1041, "Standard for Fire Service Instructor Professional Qualifications", 2012 Edition, Level I

4. (1) A certification standard set out in item 1, 2, 3, or 4 of **Table 1** does not apply with respect to a firefighter who,

(a) became a firefighter before July 1, 2019; and

(b) performed the fire protection service that the standard corresponds to before July 1, 2019.

4. (3) A certification standard set out in item 1, 2 or 3 [note: no 4] of **Table 1** does not apply with respect to a firefighter that both of the following criteria apply to:

Note: On January 1, 2020, subsection 4 (3) of the Regulation is amended by striking out "item 1, 2 or 3" in the portion before paragraph 1 and substituting "item 1, 1.3, 2, 3, 5 or 6". (See: O. Reg. 379/18, s. 5 (1))

1. The firefighter became a firefighter before July 1, 2019.

2. The firefighter's fire chief was given permission by the Fire Marshal to issue the firefighter a Letter of Compliance with NFPA Standards respecting the relevant standard under Fire Marshal's Communiqué 2014-04, "Transition to NFPA Professional Qualifications Standards: Grandfathering Policy", which is dated January 2014 and available on a website of the Government of Ontario.

4. (4) A certification standard does not apply with respect to a firefighter who, prior to July 1, 2019, was certified to an earlier version of that standard.

4. (5) If subsection (3) or (4) provides that a certification standard does not apply with respect to a firefighter, that firefighter is deemed to be certified to that standard for the purpose of clause 3 (1) (b).

The Municipality of Meaford should conduct an audit of their existing firefighters training related to Fire Suppression Activities to determine their level and request the same of any contracted area. Those who will be conducting the Fire Suppression Activities will be required to meet the Regulation and be trained or experienced appropriately. If grandfathered into this certification, appropriate paperwork should be in place. According to the Regulation, those involved in firefighting activity will have to ensure they meet the certification requirements by July 1, 2019. Those who are considered Pumper Operators will be required to have completed a full training program and become certified by July 1, 2019. Those considered Supervisors (Officers) and/or Trainers will be required to meet the certification requirements by January 1, 2020. If nothing is done, the fire service can continue to operate as it is today.

The Regulation notes:

4. (1) A certification standard set out in item 1, 2, 3, or 4 of Table 1 does not apply with respect to a firefighter who,
(a) became a firefighter before July 1, 2019; and
(b) performed the fire protection service that the standard corresponds to before July 1, 2019.

This allows those who are part of the service today, who have no record of training to grandfather them, or no certification to fall back onto, to continue in the position that they are currently in. It must be noted on the employee file to what position is held. If this individual would like to move out of that position, for whatever reason, they would then have to start their training at the beginning and acquire certification to meet the position sought. The NFPA standards referenced within the Table 1 of the Regulation denote prerequisite training that must be attained prior to taking certain courses. For example, a Fire Service Officer, Level 1 certification cannot be obtained unless the individual has Firefighter Level 1 and 2, Hazardous Materials Awareness & Operations, Fire Service Instructor Level 1, and whatever else the local fire department deems as necessary. Included in attaining the Officer position are the requirements of a Competent Worker under the Occupational Health & Safety Act. For future longevity of the fire department, this stance of doing nothing is not recommended. The grandfathering process has been extended to the end of September 2018. Details of this process can be obtained from the Fire Marshal's Office or the Ontario Association of Fire Chiefs.

Emergency Response

Many rural fire departments rely on the response of firefighters in their Personally Operated Vehicles (POV). This reliance does bring about certain liabilities for the Municipality. SOGs outlining the use of green lights, speed, traffic control devices, and where to park at incidents

should be in place. Those using POVs should be encouraged to report this use to their insurance company for file. This does not, and should not, increase any personal premiums. Additional SOGs should be in place to adequately deal with Bunker Gear deployment, storage, cleaning, and annual certification. Carrying contaminated Bunker Gear in a personal vehicle is not recommended due to the cancer-causing agents that may spread into the vehicle and then to family members.

Reliance on the use of firefighters responding in POVs, as the norm, opens the municipality to liability. If only certain people are designated as Apparatus Operators and are not available (or certified), what do those who have responded in POVs do when no apparatus arrive? In a critical moment, firefighters are trained to fix the problems at hand. It is not reasonable to expect that firefighters would not push the envelope to help trapped individuals prior to the arrival of the fire apparatus, thus putting themselves in danger. This is a considerable health and safety issue that must be addressed. Further, if the firefighters were disciplined enough to stay back, what would be the public perception of the fire department be if there was a line of firefighters watching someone's house burn and doing nothing until the arrival of the apparatus? A more appropriate model would be to have the greater number trained, with exception of those who cannot for whatever reason. This would allow depth and faster response of apparatus when those closest can respond. Limiting the number of POVs on scene also has many benefits.

Certified training for emergency response has been outlined in this report. Further training, to 'take every reasonable precaution for the safety of the worker' is necessary. This can be listed by reviewing the call history to determine the exposure and to what level. These responses and functions could include, but not limited to:

- Vehicle extrication (beyond Firefighter Level 2)
- Wildland firefighting (beyond Firefighter Level 2)
- Elevator rescue
- Trench rescue
- Traffic control

If more advanced training is required from the list below, the firefighter would have to be certified in accordance with O. Reg. 379/18 FIREFIGHTER CERTIFICATION. This list of certified programs, as set out in section 5.1 of Table 1, would have to be completed by January 1, 2021:

- Confined space rescue
- Ice rescue
- Rope rescue
- Surface water rescue

The Regulation does allow those who are performing these roles to maintain them without certification. Adequate records of training that meet the standard would still be required. This would be for the protection of the worker to ensure they are aware of the hazards of the work and the mitigating principles, tools, and equipment to use. There is no grandfathering process

for any of these functions.

The Regulation notes:

Note: Subsection 4 (2) comes into force on January 1, 2021.

4. (2) The certification standard set out in item 5.1 of Table 1 does not apply with respect to a firefighter who,

(a) became a firefighter before January 1, 2021; and

(b) performed the fire protection service that the standard corresponds to before January 1, 2021.

The Municipality would be best to ensure adequate certification for any firefighters performing these functions.

Administration

Fire Investigations

Outlining, in any agreement, what the records management processes are is essential. How does the contracted fire department report the incidents to the Municipality and to the Fire Marshal? There are requirements for this outlined from the Fire Marshal. For example, if there was a car fire in the contracted area, the call ‘type’ the contracted fire department would log is “Automatic Aid”, or “Fire Response Agreement”. They do not own the area and are only supplying the service. The local fire department would log the event as a “vehicle fire” and that it was looked after by the contracted fire department.

For certain types of fires, the Fire Marshal has an obligation under Section 9.2 of the FPPA to investigate. This section states, “*It is the duty of the Fire Marshal to investigate the cause, origin and circumstances of any fire or of any explosion or condition that, in the opinion of the Fire Marshal, might have caused a fire, explosion, loss of life or damage to property*”. The Municipality has an obligation to report these fires following the Fire Marshal's Directive: 2015-002, Reporting of Fires and Explosions Requiring Investigation.

This can be retrieved from:

<http://www.mcscs.jus.gov.on.ca/english/FireMarshal/Legislation/FireMarshalsDirectives/OFMdirective15-002.html>.

Fires outside of those listed by the Fire Marshal as reportable, may have need of determining the cause and origin. Any person involved in Fire Investigation Activities would need to be certified, in accordance with O.Reg. 379/18. Table 1 below outlines this requirement that must be met by January 1, 2020.

Table 1
Mandatory Certification

Item	Column 1 Fire protection service	Column 2 Certification standard
Note: On January 1, 2020, Table 1 to the Regulation is amended by adding the following items: (See: O. Reg. 379/18, s. 5 (2))		
1.2	Fire investigation activities	NFPA 1033, "Standard for Professional Qualifications for Fire Investigator", 2014 Edition

O. Reg. 378/18, COMMUNITY RISK ASSESSMENTS

Council has seen the Simplified Risk Assessment (SRA) that was used by the Fire Marshal's Office prior to the implementation of the NFPA standards. This SRA is a document that outlines a number of similar items, as described below. This Community Risk Assessment, as noted in the new regulation, is a fuller review that provides greater insights. This new regulation comes into force January 1, 2019 with the first Community Risk Assessment required July 1, 2024. This regulation also requires a review of the assessment every 12 months, once produced, and a rework at minimum every 5 years, or as necessary. It would be good to bring a new Community Risk Assessment to a newly sitting Council every 4 years.

This regulation commences with:

1. *Every municipality, and every fire department in a territory without municipal organization, must,*
 - (a) *complete and review a community risk assessment as provided by this Regulation; and*
 - (b) *use its community risk assessment to inform decisions about the provision of fire protection services.*

Contained in this Community Risk Assessment, Schedule 1:

Schedule 1

Mandatory Profiles

1. *Geographic profile: The physical features of the community, including the nature and placement of features such as highways, waterways, railways, canyons, bridges, landforms and wildland-urban interfaces.*
2. *Building stock profile: The types of buildings in the community, the uses of the buildings in the community, the number of buildings of each type, the number of buildings of each use and any building-related risks known to the fire department.*
3. *Critical infrastructure profile: The capabilities and limitations of critical infrastructure, including electricity distribution, water distribution, telecommunications, hospitals and airports.*

4. *Demographic profile: The composition of the community's population, respecting matters relevant to the community, such as population size and dispersion, age, gender, cultural background, level of education, socioeconomic make-up, and transient population.*
5. *Hazard profile: The hazards in the community, including natural hazards, hazards caused by humans, and technological hazards.*
6. *Public safety response profile: The types of incidents responded to by other entities in the community, and those entities' response capabilities.*
7. *Community services profile: The types of services provided by other entities in the community, and those entities' service capabilities.*
8. *Economic profile: The economic sectors affecting the community that are critical to its financial sustainability.*
9. *Past loss and event history profile: The community's past emergency response experience, including the following analysis:*
 1. The number and types of emergency responses, injuries, deaths and dollar losses.
 2. Comparison of the community's fire loss statistics with provincial fire loss statistics.

Note: Each profile is to be interpreted as extending only to matters relevant to fire protection services.

This Community Risk Assessment is to be done in a format provided or approved by the Ontario Fire Marshal.

The Municipality would be best to manage this gathering of data for the entire municipality. If Council so chooses to contract out this level of service, then clear expectation of the delivery of the information, as outlined in the Regulation, should be included in the contract.

O. Reg. 377/18, PUBLIC REPORTS

The regulation comes into force on January 1, 2020. Direction provided states, "After the fire department receives their calculated response time data from OFMEM or does their own calculations, the fire department will have six months to provide their public report to the OFMEM." Similar to an annual report to Council, the direction provided further states, "Before a fire department submits their public report to OFMEM, they must submit the report to their municipal council." This new regulation provides guidance in what is to be reported. It notes:

- 2.2 *Every fire department must prepare a public report setting out,*
 - (a) the information required by Schedule 1; and*
 - (b) any other information the fire department chooses to include.*

Schedule 1 for Volunteer Firefighters denotes:

Volunteer Firefighters

2. (1) The public report must set out the following information respecting incidents in which the first fire department unit that arrives on the scene includes at least one volunteer firefighter:

1. For each time interval set out in the following Table, the time interval value that the fire department achieves or exceeds 90% of the time.

TABLE

Item	Column 1 Time interval
1.	Alarm transfer time: The time interval from the receipt of the emergency alarm at the PSAP until the alarm is first received at the fire department communication centre
2.	Alarm answering time: The time interval that begins when the alarm is received at the fire department communication centre and ends when the alarm is acknowledged at the communication centre
3.	Alarm processing time: The time interval from when the alarm is acknowledged at the fire department communication centre until response information begins to be transmitted via voice or electronic means to fire department facilities and fire department <u>units</u>
4.	Alarm handling time: The time interval from the receipt of the alarm at the PSAP until the beginning of the transmittal of the response information via voice or electronic means to fire department facilities or the fire department <u>units</u> in the field
5.	Turnout time: The time interval that begins when the fire department facilities and fire department <u>units</u> notification process begins by either an audible alarm or visual annunciation or both and ends at the beginning point of travel time
6.	Travel time: The time interval that begins when a fire department <u>unit</u> is en route to the incident and ends when the fire department <u>unit</u> arrives at the scene
7.	Initiating action/intervention time: The time interval from when a fire department <u>unit</u> arrives on the scene to the initiation of emergency mitigation
8.	Total response time: The time interval from the receipt of the alarm at the PSAP to when the first fire department <u>unit</u> is initiating action or intervening to control the incident

(2) The public report does not have to set out information for items 1, 2, 3, 4 and 8 if the information is not available from the fire department's records.

Within the text above the word 'unit' was underlined to add emphasis. It is important that the word unit be defined within any contractual agreement so that when reports are submitted, they are done in like manner to the local Fire Department. This will allow clear analysis of the data when running comparisons. Currently, the direction given for what this word "unit" represents is that of a Fire Apparatus. In the event that a Fire Apparatus does not respond, such as a burn complaint by a Fire Officer, the Fire Officer times would be utilized.

The contractual agreement should include clear guidance for reporting incidents to the Municipality so that the Municipality can be compliant with the O. Reg. 377/18. It is recommended that these reports be conducted, at minimum, monthly. This would allow the Municipality to appropriately invoice Fee for Service, where Fee for Service applies to the service recipient. These reports should be done in such a manner and template to minimize the administrative burden on the administration of the local Fire Department. If both Fire Departments are utilizing the same Records Management System, this process can become seamless. The process could even become automated with an Automatic Program Interface (API) constructed by the vendor. Further to records management, the contractual agreement should note what the retention of records generated by the contracted fire department are.

PTSD Prevention Plan

By the end of April 2017, all Emergency Services and Corrections had to submit a PTSD Prevention Plan to the ministry. The government recognized that PTSD is a workplace injury. They reiterated back to the services to say, what are we doing to stop PTSD. A plan was required to be submitted to ensure focus was placed upon prevention. Below is a minimum of what a plan should consist of. To note, the plan should be a living document with ongoing changes to the plan.

Included could be:

- CISM Team
- Peer Support Team
- Exercise regime - a healthy body equals a healthy mind
- Nutritional guidance - works with the exercise regime
- Employee Assistance Program for both the firefighter and family
- Chaplaincy program

This varied approach to providing the necessary mental health care would suit the varied needs of the individual firefighters.

Standard Operational Guidelines & Section 21 Guidance Notes

Throughout this report various references to Standard Operational Guidelines (SOGs) has been made. SOGs should be reviewed on a regular basis, some say annually. SOGs are important for

the health and safety of the firefighters in that they provide a general guide for when in an emergent and non-emergent citation. All firefighters should receive training on the SOGs and this training should be documented. SOGs that should be in place can be varied depending on the local needs.

Some examples are:

- Incident Command
- Accountability system
- Rehabilitation
- Rapid Intervention Crews
- Bunker Gear Management
- Breathing Air Program

Section 21 Guidance Notes are similar in fashion to SOGs but are produced by a committee with Provincial standing. The Section 21 Guidance Notes, and an outline of the program, can be found here: <http://www.oafc.on.ca/section-2>. These can also be used as a guide for the production of SOGs within the local fire department. Where there are relevant Guidance Notes, they should be incorporated into a local SOG. The local SOG can be more restrictive than the Section 21 Guidance Note, but it cannot be laxer. One example is Guidance Note 1-03 Backing Fire Apparatus. The Guidance Note outlines the need to have spotters when backing fire apparatus. The local SOG could include the spotters and increase the requirement by outlining the required hand signals. This more restrictive SOG would then increase firefighter safety while backing fire apparatus.

Further Considerations

Automatic Aid

It has been noted in this report that consideration of an Automatic Aid Agreement may be suitable. This by no means presumes that the writer has a full understanding of the local needs and circumstances. The intent is to provide guidance into further thought and discussion, thereby producing a clear contract that is easily followed by all parties. Section 2.6 of the FPPA states, “A municipality may enter into an automatic aid agreement to provide or receive the initial or supplemental response to fires, rescues and emergencies.” The intent of an Automatic Aid Agreement is that the Municipality of Meaford would contract the initial response to those stations of the neighbouring fire department, being that they are closer. Any further need of equipment or firefighters would then be brought from the fire stations within the Municipality of Meaford. A contractual agreement under this premise would provide clear guidance for those dispatching the services and for those responding.

Fair Workplaces, Better Jobs Act, 2017

When considering the responding firefighters, whether those contracted or those not, attention

should be paid to the financial impact that could apply under the Fair Workplaces, Better Jobs Act, 2017. While there is still much debate over the changes that will come into force in January 2019, at present, it is assumed that the impacts to the financial needs of the Fire Service will be significant. Opinion provided to the Ontario Association of Fire Chiefs by Hick's Morley, a Labour Relations law firm specializing in municipal matters, outlines that volunteer firefighters will be obligated to receive 3 hours of on-call pay when called to service within a 24-hour period. This is noted in Section 21.4 of the Act. This is not to be confused with receiving 3 hours of pay for each call as outlined in Section 21.3:

21.3 (1) If an employee who regularly works more than three hours a day is required to present himself or herself for work but works less than three hours, despite being available to work longer, the employer shall pay the employee wages for three hours, equal to the greater of the following:

- 1. The sum of,
 - i. the amount the employee earned for the time worked, and*
 - ii. wages equal to the employee's regular rate for the remainder of the time.**
- 2. Wages equal to the employee's regular rate for three hours of work.*

As can be seen in Section 21.3, volunteer/part-time firefighters do not regularly work more than three hours a day. Therefore, this Section does not apply to volunteer fire services. There is uncertainty throughout the Fire Services that this may apply to full time staff.

Section 21.4 outlines the necessity to pay 3 hours when reporting for a call back after being on call. As can be seen in the wording in this referenced sentence, there is no time outlined for being on call:

21.4 (1) If an employee who is on call to work is not required to work or is required to work but works less than three hours, despite being available to work longer, the employer shall pay the employee wages for three hours, equal to the greater of the following:

- 1. The sum of,
 - i. the amount the employee earned for the time worked, and*
 - ii. wages equal to the employee's regular rate for the remainder of the time.**
- 2. Wages equal to the employee's regular rate for three hours of work.*

There is an exception to this on call pay that would have to be paid every day a firefighter is on call. Section 21.4(2) states:

21.4(2) Subsection (1) does not apply if,

- (a) the employer required the employee to be on call for the purposes of ensuring the continued delivery of essential public services, regardless of who delivers*

those services; and

(b) the employee who was on call was not required to work.

While the 3-hour pay would not be required to be paid to a volunteer firefighter, if there was no call in (not required to work), the 3 hours would be required to be paid if the volunteer firefighter were to be called in for service. To note again, this pay would occur only once in a 24-hour period. Further, no draft regulation has been tabled, as of yet, that would provide any further exemptions to the Fair Workplaces, Better Jobs Act.