

7:30 P.M.

**TOWN OF THE BLUE MOUNTAINS**

**FIRE SERVICE MASTER PLAN**

**Executive Summary**

## Introduction

This document is an updated Executive Summary of the Fire Services Master Plan. It references several documents, which have been circulated earlier. These documents include:

- The Fire Services Master Plan, submitted by Marshal Macklin Monaghan Consultants – Final Draft submitted February 20, 2007
- Peer Review of the Master Plan document – Prepared by the Office of the Fire Marshal, September, 2006
- MMM's reply to the OFM Peer Review – submitted September of 2006
- Peer Review of the Master Plan document – Prepared by Peter Corfield and Associates, May 2007
- MMM's reply to the Corfield Peer Review – submitted April 21, 2008
- Call Statistics – 2003-2007
- Terms of Reference from the RFP for the Fire Service Master Plan – 2005

## **EXECUTIVE SUMMARY**

This report documents a Fire Master Plan for the Town of the Blue Mountains, encompassing the years 2008 to 2023. The Town has been growing rapidly, and this is expected to continue for the foreseeable future. To meet the sizeable challenges associated with that growth, in terms of fire protection, significant upgrades to the Town's fire service capabilities are needed. These must be started immediately, to address current deficiencies, and staged on a manageable basis over the Master Plan timeline. This report provides the implementation strategy needed.

The recommendations summarize the original draft Master Plan recommendations, which have been adjusted and enhanced through two Peer Reviews and consideration by Fire Services staff of the Town of the Blue Mountains.

The Town is growing at an extremely rapid rate. There are approximately 6,600 residential units either in the planning process or designated, which represents an increase of 182% over the number present in 2003. Resort developments are also growing rapidly. The Intrawest development alone is expected to attract 2,000,000 day visitors per year. There is also substantial development remaining to be implemented in the Blue Mountain Village. These two types of development involve a high level of active recreation and auto travel to the Town, which will substantially increase emergency service demands. This represents a "quantum leap" up from the level of development which the existing Fire Service was designed to protect. The Town's resort and residential developments bring special challenges to the delivery of municipal fire services, especially in the areas of response requirements, staffing, fire prevention, and education and training. While these modern buildings may be less likely to be involved in a fire, the limitations of modern lightweight construction coupled with the complexities of a significant occupant load present an infinitely higher potential for loss of life and property loss.

These massive investments in the Town's economy also bring the potential for massive property loss due to fire. The Town needs to be prepared for these potential situations. This need compounds the challenges currently facing the municipality, specifically the ability to accommodate the influx of 'dual citizen' residents and visitors attracted to the area each year, and the Town's difficulty in recruiting and retaining a sufficient supply of volunteer fire-fighters. The trend over the past years has been a decreasing number of volunteer fire-fighters, and decreased attendance by volunteers.

A large number of improvements to the Town's fire service are essential. Failure to make improvements with the development conditions occurring in the Town is expected to leave it open to liability issues. Blue Mountains Village alone is understood to involve

an investment of \$1 billion in property. If a loss of life occurs, this could involve a coroner's inquest, potential legal action against the Town, and increased insurance rates.

## **Overview of Plan Components**

### **Basic Definitions of Response Time Components**

It is important to understand the time components that constitute response by a Fire Services vehicle to an emergency. For a volunteer or composite (i.e. combined volunteer and full-time firefighter) service, the key components are:

- Assembly time: this is the time during which volunteers travel to the station in response to an alarm. It varies widely in many municipalities. The goal is to have firefighters living/working within less than a 1 or 2-minute drive;
- Deployment time: the time for the firefighters to put on their uniforms, mount the vehicle and leave the station;
- Travel time: the time from leaving the station to arriving at the emergency scene. A four minute travel time for first response is widely accepted as a best practice; and
- Response time: this encompasses all of the time components noted above.

### **Basis in Best Practices**

This Plan has been developed on the basis of best practices and accepted standards in the industry, and it is designed to maintain, or if possible, enhance the Town's Fire Underwriters Survey (FUS) rating. The FUS rating affects insurance rates for the Town, its businesses and institutions based on a comprehensive review of the services and programs offered by the Fire Service.

A Master Plan must be based on the most detailed and reliable standards or guidelines available for its subject, but also recognize local conditions. The standards of the Ontario Fire Marshal (OFM) are appropriate for single-family dwellings. In more developed areas, the standards of the National Fire Protection Association (NFPA) are appropriate. The NFPA is a professional association of fire service officials and others in emergency service industry, and they represent the most informed body on the subject. The NFPA standards represent best practices in the industry, and are similar to accepted levels of service in the transportation field. One must plan intersections to provide the capacity needed to accommodate the traffic projected, and similarly one must plan the fire service for the projected risks in a community. While these are less evident than traffic at an intersection, they are no less real.

## **Level of Service**

The Master Plan must define the “level of service” provided by the Fire Service. Level of service can be defined primarily in terms of the range of programs offered and the time benchmarks for response to incidents. The Town offers first response fire suppression now, as well as various specialty rescue services. The preferred level of service should include building search and rescue as well as interior firefighting operations as a core service because of the type of development occurring in the Town. The Fire Department is currently unable to deliver this level of service due to a significant shortage of trained and experienced firefighters. To not offer building search and rescue as a core service would result in an unacceptable level of life risk. Also, with the increasing urbanization of the Town, response time guidelines appropriate to that form of development are recommended.

For the safety of responding firefighters, these operations should be carried out in accordance with the guidelines set out in the applicable OFM and NFPA standards. These standards outline acceptable response times for both urban and rural areas, as well as acceptable staffing levels and other operational requirements. Adhering to these and other standards identified in this report is essential in ensuring that the Town’s future communities are properly serviced by an effective fire service offering safety to the Town and the fire-fighters.

## **Future Strategic Direction**

Since the analysis for the Master Plan was completed, the Town has undertaken two peer reviews of the study. One of the key issues is whether the Service should remain primarily staffed by volunteers. Based on these peer reviews, the team developed two options for the Town’s strategic direction in moving forward that are cognizant of the Town’s fiscal direction as well as emergency service needs. These options are as follows:

1. Implement a new Comprehensive Volunteer Recruitment and Retention program in an effort to create a stable long-term volunteer firefighter complement (reflecting a better level of compensation as recommended in the Peer Review). Based on this review, decide if the Town should move to a full-time service or remain a primarily volunteer service considering the following:
  - a. If the strategic review shows a high likelihood of attracting sufficient volunteers, maintain the “Comprehensive Volunteer Recruitment and Retention Strategy” as an interim step in the Master Plan course of action, with the long-term goal of moving to a composite service with full-time staff

- b. If the experience shows a low likelihood of attracting sufficient volunteers, finalize the Master Plan “as is”, with an updated timeline reflecting any interim hiring the Town has completed.
2. Complete the Master Plan “as is”. This will involve an immediate move toward a composite system, with a volunteer complement supporting up to twenty full-time firefighters.

The pros and cons of each option are described in more detail in Table ES1 below.

**Table ES1. Pros and Cons of the Options**

<b>Option</b>	<b>Pros</b>	<b>Cons</b>
1. Implement a new comprehensive Volunteer Recruitment and Retention Program	<ul style="list-style-type: none"> <li>- least costly option</li> <li>- comprehensive approach will explore all options for creating a sustainable volunteer service</li> <li>- success or failure of the program will demonstrate what, if any, level of full-time fire department staffing is required</li> </ul>	<ul style="list-style-type: none"> <li>- will delay the process of reaching staffing levels needed to meet level of service</li> <li>- may expose the Town to some risk, as the preferred Level of Service may not be attained in the short term</li> </ul>
2. Complete the Master Plan “as is”	<ul style="list-style-type: none"> <li>- will provide a timely solution to on-going Fire Department recruitment and retention challenges</li> <li>- provide a more stable complement of firefighters</li> <li>- should reduce response times and facilitate the preferred Level of Service</li> </ul>	<ul style="list-style-type: none"> <li>- significantly more expensive</li> <li>- time-frame for significant service improvements will depend on the Town’s ability to afford full-time staffing</li> </ul>

The recommended option is Option 1, because it provides a logical, evidence-based means of proceeding. It therefore appears to provide the best opportunity to realize improvements in the Fire Service.

## **Improvements Needed**

The analysis presented in this report indicates an urgent need for improvements to the Town's existing Fire Service in terms of the number of stations, equipment, apparatus and requirements for staffing. Key indicators of these needs are:

- The Town's growth projections support the need for a future additional station in the Castle Glen area. This is likely several years in the future and should be coordinated with development activity.
- The Blue Mountain Village and the districts of Craigleith and Lora Bay are projected to house a significant amount of development. Lora Bay is asking for additional servicing ahead of the original timeframe.
- Under existing conditions, Fire Station 2 (Teed) is unable to service much of the Craigleith district within a 4.0 minute response travel timeframe. Resources are significantly below what is needed to provide adequate coverage to high intensity, high activity uses such as Blue Mountain Village, which is understood to have a total property value of \$1 billion at build-out. While there may be ups and downs in the Ontario economy, it is understood that growth in the Village has always exceeded forecasts. Building permit activity peaked in the range of \$110M annually. New development is expected to continue at a rate of 250 residential units annually.

An investment into a new fire station also requires an investment in new personnel and new equipment. A review of the Town' existing personnel and apparatus has been documented to determine the necessary resources required to equip the new Fire Station at Castle Glen and to improve the fire service provided by the Town from its existing stations.

## **Key Recommendations**

- 1. Level of Service:** The Town should define the level of service for fire protection as being first response fire suppression, including offensive (interior) firefighting as well as interior search and rescue, in order to ensure the safety of its residents and visitors.

Specifically:

- a. For low-density development (i.e. areas largely made up of single-family dwellings), the OFM "10 in 10" guideline should be applied. This requires ten firefighters on-scene within ten minutes, 90 percent of the time;
- b. The small section of the municipality including and surrounding the Blue Mountain Village is more urban in its makeup, from an emergency response standpoint. We recommend an enhanced response in terms of both manpower

and response time for emergency responses in this zone. If Council should direct the Fire Department to continue to provide interior fire attack and search and rescue in the more complex structures within the municipality, we recommend the application of a staffing standard which exceeds the OFM “10-in-10” guideline.

Many of the buildings, while they may not be “high-rises” by definition, present the same challenges that a high-rise would. The population density is more typical of an urban area, and there is the additional challenge of a population made up mainly of transient residents. These factors make the task of evacuating, accounting for and possibly rescuing these residents extremely difficult and labor-intensive.

These operations should be carried out in accordance with the appropriate NFPA guidelines for the organization and deployment of fire services. Compliance with these standards will help to ensure responder safety, maximize the efficiency of fire protection services, and minimize the Town’s potential exposure to liability. The Town should base its fire service planning on appropriate sections of NFPA Guideline 1710 for the highly urbanized area. Guideline 1710 addresses the organization and deployment of fire departments in urbanized areas, for full-time fire services.

It has been a widely accepted practice in the Ontario Fire Service to draw on this standard when developing Standard Operating Guidelines, even if the standard is not adopted in its entirety. The suggested response would include a pumper with an initial response crew of four, on scene within four minutes of alarm, followed by an additional ten responders on scene within 10 minutes; this guideline would be expected to be met 90% of the time, per the NFPA Standard.

2. Timing for updates: In a growing municipality, it is important to update the Fire Master Plan at regular intervals. This Master Plan should be reviewed and updated as necessary in 2013, after the first 5 years, and again in 2018, after 10 years;
3. The fire service component of the Development Charge Bylaw should be reviewed at the next opportunity to do so, in order to maximize the amount of capital available for the recommended improvements. The only two major sources of revenue for the plan are DCs and taxes; a small amount of revenue could be obtained through user fees for services such as inspections. The basis for level of service in the DC bylaw should be reviewed, in order to determine if an adjustment is possible to the historic 10-year level of service, so that the Town can obtain additional capital for these necessary improvements; and,
4. The Town should recognize that it is not the intent of this report to engage in labour-management negotiations and/or contracts. However, since this may become a composite fire department – i.e. one structured such that full-time fire-fighters and volunteer fire-fighters work together cohesively - it would be prudent to carefully ensure this cooperation will be understood by all, in the writing of the union contract with the municipality.

## **Implementation Strategy**

The implementation strategy recommendations have been grouped as follows:

- Non-time sensitive recommendations - program or policy changes which the Fire Service should make as soon as practically possible, in terms of the Service being able to manage their development and integration. They do not relate to a particular timeline or development, but are needed to address current deficiencies or to cope with growth on a general level;
- Immediate/short-term recommendations. These are expected to be needed within the 0-5 year timeframe. Where these have an immediate priority, consideration has been given to how these relate to the Town's budget process;
- Medium-term recommendations. These are expected to be needed in the 5-10 year timeframe.

It should be noted that the timing of some improvements is based to some extent on current trends in development. If these accelerate or decelerate, the timing may need to be reviewed. The years cited below have been based on these current development trends, and should be seen in that context. It is important to maintain the timings presented below, to retain or improve the FUS rating and adhere to the response guidelines discussed in this report.

### **Non-Time Sensitive Recommendations**

Some recommended actions are not time-sensitive, in relation to development. The Fire Service should undertake these changes as soon as is practical, based on funding and ability to manage the changes. These include:

1. Areas with low fire flows from hydrants should be modified to increase flow rates, via introduction of larger water mains, looping of mains, adjustments to pressure relief valves, and installation of booster pumps. This would be an ongoing program of improvements, to be coordinated with the Engineering and Public Works Department.
2. All hydrants should be tested, maintained and colour coded in accordance with NFPA Standard 291. This is a standard intended to assist in the efficiency of fire suppression.
3. It is recommended that the FUS publication, "Water Supply for Public Fire Protection" be consulted and used as a guide when developing and/or expanding the water distribution system.

4. It is recommended that the municipality maintain its existing formal Vehicle Replacement Program for Fire Service vehicles.
5. It is recommended that there be an annual review of the operating budget for the Training Division, as the municipality grows, to cover the increased requirement of courses, training materials and equipment.
6. It is recommended that the purchased protection agreements with Meaford and Grey Highlands, whereby fire protection is provided to certain areas of their respective municipalities, not be renewed when they are due for renewal, as these municipalities do not have sufficient resources to provide a mutual service. Potential agreements can always be investigated in future when these municipalities acquire more resources.
7. It is recommended that consideration be given to the use of a written examination for Officer Positions.
8. It is recommended that any new facilities or facility expansions be designed to house modern fire fighting apparatus and equipment, administration offices, training room and full-time staffing requirements.
9. Conduct a review and revision of the Town's Fire Service Simplified Risk Assessment and Municipal Fire Protection Information Survey. This should be an on-going process aimed at keeping all information relating to the needs of the municipality with regard to emergency services current.
10. There are a number of recommendations specific to **fire prevention**. These are as follows:
  - a) Firefighters should be recruited such that their duties include fire prevention duties during the times they are not actively responding to emergencies. It is a common practice within the Fire Service to assign routine inspections to on-duty firefighters. The thinking is that having these firefighters out in the community inspecting properties only serves to make them more familiar with these buildings, something which could become very valuable in the case of an emergency;
  - b) Maintaining the current requirement for annual inspections of commercial properties within the municipality, in order to maintain our high standards of compliance with the Fire Code and other legislation;
  - c) Continue the existing pre-planning program. This program defines the "plan of attack" for specific properties of concern, and the pre-plans enhance firefighter safety and the effectiveness of the response.

## Immediate/Short-term Actions

These actions are recommended for the 0 to 5 year timeframe. Development “triggers” for action are cited in cases where the timing of new development is uncertain; the actions proposed are reflective of general expectations for increases in call demand, but are left open for further study by the Fire Service as development continues.

Recommendation	Specific Year (if applicable)
10. Implement an improved volunteer retention strategy (as described above under Option 1), to attempt to bring the number of volunteers up to the prescribed roster levels. The strategy would involve increased compensation based on level of training, so that the time a volunteer is trained to the level required of a full-time fire-fighter, compensation should be approximately at that level as well. The Town should also consider providing some level of employment benefits to the volunteers, and encourage career growth and development in the Blue Mountains. This is not expected to entirely replace the need for hiring full-time staff.	2008
11. The continued use of the OFM’s Recruitment and Retention Guide as a minimum standard in developing new strategies for volunteer recruitment is recommended. These guidelines, along with Town-specific enhancements, should form the basis of the Comprehensive Recruitment and Retention program.	2008
12. Create 2 new positions, “part-time firefighter / part-time Fire Prevention Officer”, as a key component of the Comprehensive Recruitment and Retention Program.	2008
13. Restructure the current role of Fire Prevention Officer to that of Chief Fire Prevention Officer, in order to better reflect the responsibilities of the position, including the supervision of a number of part-time FPO positions.	2008
14. Create the position of District Chief at Station 2. This new position would encompass the positions of Station Chief and supervisor of operations in the eastern half of the Fire Department’s response area. Hiring requirements for the District Chief position could include that the candidate be a CEMC.	2008

<p>15. Create the position of Chief Training Officer/Fire Captain with the responsibility for the oversight of the Department's overall training program and supervision of the existing Trainer Facilitators at both stations. The successful candidate would also be expected to fulfil the role of Fire Captain and would respond to emergencies as such.</p>	<p>2008</p>
<p>16. Conclude an agreement Grey County Emergency Medical Service (EMS) for the construction of a new EMS station at the Teed Fire Station site. Ensure that the site planning and design also allows for the expansion of the existing Fire Station</p>	<p>2008</p>
<p>17. Undertake a public education initiative via the resort operators, to make visitors more aware of the need to provide a clear path for emergency vehicles. Work with the operators to define the form of that program, and participate in its implementation. This is conceived as (at minimum) including notices in hotel rooms, and on informational materials distributed by the resorts.</p>	<p>2008</p>
<p>18. Meet with the development community to review the issue of sprinklering low-density housing, focusing on the benefits of sprinklers for fire suppression in isolated pockets of development. This would be a voluntary program given the current lack of provincial legislation. Assuming that consensus on this benefit is obtained, proceed to make this a condition of approval for low-density housing approvals in areas outside the 4-minute travel time contour for the existing fire stations.</p>	<p>2009</p>
<p>19. Complete the construction of the new EMS stations and the expansion of Fire Station # 2.</p>	<p>2009</p>
<p>20. Based on the results of an annual review of the Comprehensive Recruitment and Retention Program, begin the hiring of full-time firefighters for Station 2. A hiring of 2 firefighters in 2009 is recommended. The action plan should be revised as appropriate, based on continuing annual reviews of the program and an on-going needs assessment of Fire Department staffing.</p>	<p>2009 - 2010 or beyond (depending on program results / funding availability)</p>
<p>21. It is recommended that the dispatch service acquire the capability of electronically sending data to each Fire Station, so that running route information (running cards) can be printed at each Fire Station, at the time of dispatching. This will assist in providing faster response.</p>	<p>2009</p>

## Medium Term Actions

These actions are recommended for the 5 to 10 year timeframe.

Recommendation	Specific Year (if applicable)
22. Reserve property for Station 3 in the Castle Glen development area.	2013
23. It is recommended that fire-fighters at Fire Station 2 be trained and utilized to conduct fire inspections, assist with pre-planning and perform public education tasks, to assist the CFPO.	2013
24. Review staffing needs for Station 1, when 500 residential units are developed in Lora Bay, based on call volume and response time adequacy	2013 – beyond (based on development and economic indicators)
25. It is recommended that the full-time staff complement be staged to increase to 20 full-time personnel to provide 4 full-time Captains (1 per shift) and 16 full-time Fire-fighters (4 per shift) for Station 2. The size of the full-time complement and the timing for their hiring will be based on the results of the on-going Comprehensive Recruitment & Retention Program.	2013 - 2018
26. It is recommended that the full-time complement of staffing at Station 1 be increased to 20 full-time personnel to provide 4 full-time Captains (1 per shift) and 16 full-time Fire-fighters (4 per shift). The size of the full-time complement and the timing for their hiring will be based on the results of the on-going Comprehensive Recruitment & Retention Program, as well as other economic and demographic indicators.	Beyond 2018 (estimated, based on development expectations - i.e. when 1,000 units are developed in Lora Bay)
27. Design and tender the construction of Station 3 in Castle Glen, then proceed to construction when the development reaches approximately 500 occupied units (or if total call volume accelerates the need). It is expected that three bays will be required. Construction of this station is expected to take place beyond 2015 (in the period 2015 to 2018). This new station will also require a new Pumper Truck and Tanker Truck.	Beyond 2018(estimated, based on development expectations – when 500 units are developed in Castle Glen)

## **Costing**

There are sufficient funds in the existing 3-year operating budget to implement the Immediate / Short Term Recommendations.

The future Medium Term costs are far less clear and will depend directly upon the success of the Comprehensive Volunteer Recruitment and Retention Program. This will be reviewed annually as part of the Town's Budget process.