



## Comprehensive Review of Fire Protection Services in the Township of Montague



June 29, 2006

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Ron Haskins	Fire Chief	Township of Montague
Kirk Parsons	Program Specialist	Office of the Fire Marshal
Peter Kavanagh	Member at large	Township of Montague
Doug Dolan	Member at large	Township of Montague

## **1.0 Terms of Reference**

### **Township of Montague Terms of Reference Montague Fire Services Municipal Review and Master Fire Plan**

In view of the decision of the Township of Montague Council that a Fire Services Review be conducted and a Master Fire Plan be developed, an evaluation will be made of the Montague Township Fire Department.

#### **Objective of the Review**

The objective of the review is to evaluate the current fire protection services of the Township and to make recommendations to council for improving the efficiency and effectiveness of those services.

#### **Scope:**

It is considered advisable that an assessment be conducted of the existing fire protection services utilizing the Public Fire Safety Guideline 01-01-01 Optimizing Public Fire Safety.

The use of the Public Fire Safety Guideline will not preclude the Office of the Fire Marshal staff dealing with issues or concerns that may not be identified in the Guidelines.

#### **Steering Committee Process**

A Steering Committee will be established comprised of the following persons or groups:

- *Office of the Fire Marshal staff*
- Township council members
- Chief Administrative Officer
- Fire Chief
- Two members of the public.

The Steering Committee will provide regular status reports on the process to council and provide a final report to council, based on the finding of the sub-committees and such other reports as may be necessary. The final status report will provide a thorough description of the current status of fire protection services, fire risk in the municipality and the economic circumstances of the municipality. It will include recommendations to assist the Township of Montague to ensure effective and efficient fire protection services are provided in accordance with the needs and circumstances of the community.

The Steering Committee shall establish three sub-committees to address the Economic Circumstances, Risk Assessment and Capabilities of Existing Fire protection Services, and such other sub-committees as may be necessary from time to time.

The sub-committees will provide regular status reports on the process to the Steering Committee and provide a final report to the Steering Committee.

## **Responsibilities**

### **The Township will:**

- Provide appropriate and sufficient resources to conduct the review in a timely manner and
- Monitor and manage progress to ensure that the review process is completed within the scheduled timeframe and that resources are brought to bear in a timely way to facilitate the progress.
- Provide meeting facilities, all necessary documentation and information to complete the review and master planning process
- Create a Master Fire Plan and any required and related documents and drafts
- Commit to an implementation schedule of the Master Fire Plan
- Commit to monitoring reviewing and revising (as necessary) the Master Fire Plan at least annually, or more frequently as circumstances change that may affect the plan.
- Complete the Municipal Fire Protection Information Survey, using information gathered during the review process, to determine compliance with the minimum requirements of the Fire Protection and Prevention Act.
- Forward all inquiries regarding findings, process, information provided during the review and master planning process to the Chief Administrative Officer of the Township

### **The Office of the Fire Marshal will:**

- Assist with development of terms of reference, including committee membership and respective roles as responsibilities as a first step in the review and master fire planning process
- Facilitate the application of a comprehensive process, including risk assessment, capabilities assessment and gap analysis through the application of risk management tools and resources to identify potential risks and to assist with identifying options and solutions
- Assist as necessary with analysis and interpretation of data from the risk assessment
- Consult with appropriate stakeholders while providing assistance during the review process. Confidentiality will be ensured in conducting interviews during the course of the reviews.
- Advise the municipality on the preparation of a status report to council outlining gaps and possible options for improvement

- Assist the municipality to determine and appropriate fire protection services plan by identifying and assessing options for efficient, effective and economical fire protection and prevention services
- Provide technical support, advice and assistance as required by the Fire Chief and other municipal employees during the review process and development and implementation of the Master Fire Plan
- Participate in meetings and advise on developing reports and the final planning documents
- Assist with research into best practices and experiences in other jurisdictions
- Review draft documents, as requested, and provide written comment
- Review the finished status report and Master Fire Plan and provide comment by letter.
- Forward all inquiries regarding findings, process, information provided during the review and master planning process to the Chief Administrative Officer of the Township

### **Schedule**

The Steering Committee will schedule meetings at an appropriate frequency to ensure effective progress

The Steering Committee will prepare a complete status report, complete with recommendations and implementation options for presentation to council by January 30, 2006.

## **2.0 Executive Summary**

The decision to proceed with the review stemmed from the introduction of the Risk & Resource Rationalization Process by the Office of the Fire Marshal in March, 2005 and the desire, of Council, to develop a Fire Master Plan that sets out the appropriate level of fire protection services for the Township.

The Office of the Fire Marshal has a mandate to assist municipalities to fulfill these responsibilities and assists them to make informed choices based on objective analysis.

The Township of Montague hired a fire service specialist, Mr. W. A. (Bill) Bowles to conduct the review and assist with development of a Master Fire Plan.

This review indicates that the Township of Montague is providing fire protection services in accordance with its needs and circumstances as required by the Fire Protection and Prevention Act.

The report includes a number of recommendations that if adopted would improve the effectiveness and efficiency of the fire department.

The following represents the key findings of this review.

### **2.1 Risk Assessment**

The Consultant reviewed the factors affecting risk in order to evaluate the capabilities of the existing fire protection services, and identify service delivery gaps. In addition, it provided sufficient information for the consultant to base the conclusions and to make recommendations for improvement. The Township of Montague has previously completed a Simplified Risk Assessment. A simplified risk assessment is one of four components necessary for municipalities to achieve compliance with the minimum requirements of Section 2.1(a) of the Fire Protection and Prevention Act, 1997. The four components are;

1. Conduct a simplified risk assessment
2. Provide a Smoke Alarm Program, including home escape planning
3. Distribution of public education information and delivery of public education programs
4. Fire prevention inspections on complaint or request

A Certificate of Compliance recognizing that that municipality met the minimum requirements of Section 2.1(a) of the Fire Protection and Prevention Act 1997 was presented by the Office of the Fire Marshal on April 18, 2006 to the Township of Montague council.

The simplified risk assessment conducted by the municipality is not intended to identify all risk hazards. A more comprehensive risk assessment was conducted for this review.

The review identified a number of high-risk occupancies and the MFD is addressing the risk through fire prevention and inspection services through regular scheduled inspections.

The municipality is not expected to experience substantial growth, however growth is expected to be in the residential category. This will require increased attention to fire prevention and public education activities.

## **2.2 Economic Circumstances**

The analysis of the economic circumstances of the Township of Montague is based upon information provided by the municipality as well as from Statistics Canada and the Municipal Property Assessment Corporation.

Present funding appears to be adequate in providing the fire department to meet its mandate of providing optimum fire protection. However, with the increasing emphasis for more fire prevention and public education activities may require more human resources.

The majority of the recommendations of this review will have little financial impact on the municipality. Two of the recommendations; provision of administrative facilities and; possible provision of a second fire station, if adopted, will have one time capital impact and on-going annual maintenance and support costs.

Appropriate resources should be provided to implement the recommendations outlined in this report and subsequently maintain them.

## **2.3 Capabilities of the Existing Fire Protection Service**

This review includes an evaluation of the current capabilities of the fire protection services in the municipality. The present fire department model is heavily reliant on the emergency response (suppression) component of the three lines of defense which make up the Ontario Fire Safety and Protection Model; public education and prevention, fire safety standards and enforcement, and emergency response.

Improvements to the present system should be made to the first two lines of defense:

- I. public education and prevention,
- II. fire safety standards and enforcement.

The Fire Chief of the department is enthusiastic and dedicated to providing the services he recognizes as being extremely important. Given appropriate organization, support and guidance the department should have no difficulty in providing an enhanced level of public education and fire prevention. Public education and prevention are extremely important for those areas of the Township that are farther away from the fire stations.

### **2.3.1 Administration**

A number of administrative matters need to be improved, including revising by-laws and agreements, revising policies and standard operating guidelines, improving record management and effective long term planning.

There is a need for improved administration facilities for the fire chief and other officers of the department.

### **2.3.2 Emergency Response**

The third line of defense is the emergency response by the fire department. This has been the primary role of the all fire departments in the past and is a component in the delivery of fire protection services.

The fire department is providing emergency responses within its needs and circumstances and these services include; fire suppression with rescue, specialized rescue, assistance to other agencies, etc.

The OFM has developed Public Fire Safety Guideline 04-08-12 Staffing – Single Family Dwellings to provide guidance, direction and options to municipalities for providing aggressive interior fire suppression and rescue in single-family dwellings. This guideline recommends that 10 firefighters be assembled at the scene of single family dwelling, within 10 minutes of the fire service being notified, 90 percent of the time for urban areas. It is important to note that more complex fire risks such as health care facilities, industrial, commercial and larger residential occupancies, normally require more resources than the 10 firefighters expected for single-family dwellings.

The OFM also developed Public Fire Safety Guideline 04-08A-03 Optimizing Rural Emergency Response and an accompanying Risk and Resource Rationalization Workbook. This guideline recommends that 10 firefighters be assembled at the scene of a single family dwelling, with no recommended time component, for rural areas, such as the Township of Montague.

The municipality is primarily rural in nature, with a small urban area on the border with the Town of Smiths Falls. The urban area is comprised of three small subdivisions; Atironto, Carsville and Woods subdivisions. Atironto has approximately 137 occupancies, Carsville approximately 55 and Woods approximately 44.

The department has not experienced any reported structure fires in the urban area during the time frame of this review.

Between April 11, 2005 and May 24, 2006 the fire department responded to 55 reported emergencies. Four of those calls were considered working structural fires and were evaluated for the purpose of determining staff numbers and response times of first arriving vehicles and personnel.

The department achieved 10 or more firefighters in 10 minutes or less for two of the calls (50%) and 2 firefighters in 10 minutes or less for the remaining two calls (50%). The average number of firefighters on the scene in less than 10 minutes was 5 and the average total number of firefighters responding was 10.5

The balance of the 55 reported emergencies calls were for a variety of calls. Certain of those calls, although not reported structure fires, demonstrate the ability of the department to staff various incidents.

### 3 reports of smoke outside:

- Average # of personnel = 8.6

### 9 Motor vehicle Accidents/Collisions

- Average # of personnel = 11.8
- Average # of personnel in 10 minutes or less = 3.1

### Ambulance lift/assist

- Average # of personnel = 8.25

Detailed response information is contained in Tables 1 & 2 on pages 40 and 41 of the report and Appendix "C" to the report.

Due to the lack of reported structure fires in the urban area bordering on Smiths Falls and concerns from members of the public area regarding response times from Station #1, the municipality is testing the feasibility of a second station in the area. The purpose of the trial station is to determine if such a facility would improve response times to the area.

The fire department has conducted trial runs into the area from both the existing Station #1 and the trial Station #2. The trials were conducted under non-emergency conditions and all traffic laws were obeyed.

The trial runs indicate that apparatus from Station #2 arrived on the scene of an emergency in the test area approximately 5 minutes before apparatus from Station #1 (See Table 3 on page 40 of the report).

In all of the trial runs, Station #2 responded with 2 personnel and Station #1 responded with 5 personnel. In all cases response time is only that time between dispatch and arrival on the scene.

The trial runs were conducted on regular training evenings with the majority of fire department personnel available at the stations. Actual response times under

emergency conditions would be dependant on the time of year, month, week and day, availability of personnel and their proximity to a respective station.

Council is encouraged to continue monitoring the trial station to determine if more effective operations would result.

### **2.3.3 Fire Prevention and Public Education**

The fire department conducts and delivers several fire prevention activities; however, there are no policies or guidelines in place to provide direction or performance objectives.

The Montague Fire Department does provide fire safety education through a number of activities such as the annual calendar. The department is an active participant in the Lanark County Fire Prevention and Public Education committee.

The Ontario Fire Safety and Protection Model contemplates that in those limited situations, such as a small, rural community, where after examining all available emergency response options, the expected staffing levels cannot be met, other enhancements to public safety in the form of public education and/or safety standards enforcement have been instituted to adequately address local needs and circumstances.

The community, being rural in nature, with associated longer travel distances, and having a seniors population greater than the provincial average, as well as a number of high risk occupancies, should increase it's fire prevention, code enforcement and public education activities.

### **2.3.4 Communications**

911 calls are received by the Ontario Provincial Police in North Bay and then forwarded to the Smiths Falls Fire Department Communications Center. All dispatch functions are handled by Smiths Falls Fire Department Communications Center under a written agreement with the County of Lanark. The County of Lanark has entered into a Joint Powers Agreement with the Corporation of the Township of Montague. The Smiths Falls Fire Department has a modern, up to data communications center.

### **2.3.5 Training and Education**

The fire department does have an adequate training program. The training that is provided is based on a recognized training program, the Ontario Firefighter Curriculum. The Curriculum is based on the Ontario Fire Service Standards for Fire Fighters. The Standards have been recognized by the Courts and Coroners Inquests as a minimum level of performance based training.

The department does maintain training records, however, they may not meet the expectations of the Ministry of Labour under the Occupational Health and Safety Act.

Training records should be a priority for the fire department. Employers and Supervisors under the Occupational Health and Safety Act have specific responsibilities with respect to training and the only means of proving those responsibilities are being met is through adequate records.

The department should develop and implement a comprehensive record keeping system.

### **2.3.6 Equipment and Apparatus**

The department's apparatus and equipment is maintained on a regular basis. As a result of this review the maintenance records have been improved.

The apparatus and equipment is appropriate to the needs and circumstances of Montague Township. The Township of Montague, in its budget process has identified a truck replacement plan.

## **2.4 Master Fire Planning**

This report creates the framework for the municipality to provide the optimum level of protection from fire and other related public safety. Developing a master fire plan is the next step toward ensuring this optimum level of protection.

### **Summary**

The following 7 priority recommendations should be addressed by council in the short term. There are an additional 24 Recommendations that should be addressed through the master fire planning process.

#### **Priority Recommendation – Reference Page 29**

- Council appoint a Deputy Fire Chief.

#### **Priority Recommendation – Reference Page 31**

- An office for the fire chief be provided in fire station #1 and all records be maintained in that office.

#### **Priority Recommendation – Reference Page 35**

- A comprehensive record management plan be developed to cover administrative, communications, apparatus and equipment, fire prevention and public education, training.

#### **Priority Recommendation – Reference Page 47**

- Develop and implement an Incident Management policy. Train staff to carry out expectations identified in the standard operating guidelines and evaluate incidents to ensure effective incident management.

**Priority Recommendation – Reference Page 54**

- The fire department should develop, for council's approval, a fire prevention policy statement and a fire prevention policy.

**Priority Recommendation – Reference Page 57**

- Develop and implement standard operating guidelines for post incident evaluations at all fire occurrences, and ensure appropriate training be provided to other fire department officers, such as the Fire Cause Determination course.

**Priority Recommendation – Reference Page 60**

- A draft annual training program be published and posted in the fire stations annually.

### **3.0 Introduction and Background**

The consultant conducted a comprehensive review of the fire protection services in the Township of Montague. The decision to proceed with the review stemmed from the introduction of the Risk & Resource Rationalization Process by the Office of the Fire Marshal in March, 2005 and the desire, of Council, to develop a Fire Master Plan that sets out the appropriate level of fire protection services for the Township.

The FPPA establishes the fire protection responsibilities of municipalities and the province. Municipalities are responsible for providing fire protection in accordance with their needs and circumstances. The Office of the Fire Marshal has a mandate to assist municipalities to fulfill these responsibilities and assists them to make informed choices based on objective analysis.

Fire protection is comprised of three lines of defense:

**I. Public Education and Prevention:**

Educating residents of the community on means for them to fulfill their responsibilities for their own fire safety is a proven method of reducing the incidence of fire. Only by educating residents can fires be prevented and can those affected by fires respond properly to save lives, reduce injury and reduce the impact of fires;

**II. Fire Safety Standards and Enforcement:**

By ensuring that buildings have the required fire protection systems, safety features, including fire safety plans, and that these systems are maintained, the severity of fires may be minimized; and

**III. Emergency Response (Suppression):**

Well trained, and equipped firefighters directed by capable officers are necessary to stop the spread of fires once they occur, to assist in protecting the lives and safety of residents. This is the failsafe for those times when fires occur despite prevention efforts.

Fire services have in the past primarily focused on responding to emergencies. The consultant recognizes the three lines of defence as a means for a municipality to meet its needs and circumstances under the FPPA.

### **3.1 Methodology**

This report is based upon the analysis of data provided primarily by the municipality. Both qualitative and quantitative research methodologies were employed to determine the current status of fire protection services in the municipality, and to make recommendations for improving the efficiency and effectiveness of those services.

To ensure that the consultant had an understanding of the situation and to provide for feedback and municipal input, a steering committee was established by council. The steering committee consisted of two residents of the municipality, a representative of the Office of the Fire Marshal, members of the Township Council, the CAO of the municipality and the Fire Chief. The steering committee meetings served as a forum to receive valuable input on issues and concerns related to the delivery of fire protection services.

These meetings were a valuable source of information.

Quantitative research was based on a number of sources including: OFM data, municipal data, Statistics Canada, Government of Ontario information, Municipal Property Assessment Corporation data as well as information provided by the fire department.

The scope of the report, guided by the terms of reference, reviewed the fire risk in the community on a limited basis, the capabilities of existing fire protection services, and the economic circumstances of the municipality. It includes recommendations to assist the Township of Montague to ensure effective and efficient fire protection services are provided in accordance with the needs and circumstances of the community.

The *Fire Protection and Prevention Act, 1997* (FPPA) provides for the legislative authority to conduct a review.

- The OFM has the authority to review fire protection services under Part III clause 9(1)(a)

*Powers of the Fire Marshal*

*9(1)(a) The Fire Marshal has the power to monitor, review and advise municipalities respecting the provision of fire protection services and to make recommendations to council for improving the efficiency and effectiveness of those services.*

- The OFM has the authority to collect information under Part III subsection 11(2) and 11(3)

*Duty to report*

*(2) 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.*

*Submitting report*

*(3) A report under subsection (2) shall be made in the form and manner and within the time period specified by the Fire Marshal.*

Municipal responsibilities for the provision of fire protection services are contained within Part II, Section 2

*Municipal Responsibilities*

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.*

In meeting its obligations under 2(1)(b) the municipality conducted a review of its fire protection services. The municipality hired Mr. W.A. (Bill) Bowles, a Fire Service Consultant to conduct the review and assist with the preparation of a Master Fire Plan.

## **4.0 Risk Assessment**

Risk assessment is the overall process of risk analysis and risk evaluation. Fire risk is a measure of the probability and consequence of an adverse effect to health, property, environment or community as a result of a fire occurrence. It is not simply the frequency of fire in a subject property. Properties with a very low probability of having a fire (indicated by no fire loss records) but are occupied by a large number of non-ambulatory persons would be considered a significant fire risk. Buildings that have only a few occupants but incur a large number of fires every year may also constitute a significant fire risk. Properties with a low probability of fire occurrence can still be of significant risk if the impact of fire is high, such as a factory that is the primary employer in a community. In addition, a property that has a low impact of fire occurrence but a high probability of fire occurrence can be a significant risk.

The fire risk in a municipality can be organized into three basic headings that help to focus the analysis of the fire safety situation:

1. Property information;
2. Occupant information; and
3. Fire loss information.

Municipalities have a legislated responsibility under the FPPA to provide public education with respect to fire safety and certain components of fire prevention. Conducting a simplified risk assessment is the first step towards compliance with these requirements and is intended to identify information required by a municipality to make informed decisions about the programs and activities necessary to effectively manage the community fire risk based upon local needs and circumstances.

Needs and circumstances relate to a municipality's economic situation, geography, population, building profiles, service delivery system and fire risk profile. The identification of the fire risk within Montague Township is intended to create a fire risk profile that will assist in identifying appropriate programs or activities that can be implemented to effectively address the fire safety needs of Montague Township.

A simplified risk assessment has been completed and submitted to the Office of the Fire Marshal for approval.

A Certificate of Compliance was presented to the Township of Montague council on April 18, 2006.

### **4.1 Township of Montague – Profile**

The Township of Montague is a rural community with a small urban area in the County of Lanark and is bordered by the Town of Smiths Falls, the Township of Beckwith, the City of Ottawa and the Village of Merrickville-Wolford. The Rideau River serves as the boundary line between Smiths Falls and the Village of Merrickville-Wolford.

The Township has a permanent population of 3,176. The Township serves as a bedroom community for the Town of Smiths Falls and the City of Ottawa.

The area of the Township bordered by Smiths Falls has a small urban area with approximately 137 occupancies in an area known as the Atironto subdivision. There are also two concentrated residential area, Carsville subdivision with approximately 55 occupancies and Woods subdivision with approximately 44 occupancies.

The municipality is 277 square kilometers or 27,700 hectares. The majority of residents work outside the municipality. The only major employer in the Township is the Rideau Regional Center which is scheduled to close in 2009 and a small tourism and service based economy. The municipal tax base is predominately derived from residential occupancies.

Montague Township is accessible by road, rail, water and air. Highway 15 is a minor thoroughfare that runs through a portion of the community. The route handles a small amount of heavy transport truck traffic. County roads are the other arterial roads used to commute to Ottawa, Perth and Merrickville. Water traffic is related mainly to tourist and recreational use. The Smiths Falls – Montague airport is located on Van Exan Drive in Montague Township.

Canadian Pacific Railway traffic travels through the community daily. Train lengths vary considerably. Dangerous goods are potentially a component of almost every train. Dangerous goods carried by these trains include tank cars of gasoline, fuel oil, caustic soda, chlorine, styrene, sulfuric acid, sodium hydroxide, hydrogen peroxide and propane. These dangerous goods constitute a significant risk for the municipality.

Specialized assistance is available through both mutual aid and the Province of Ontario. Level 2 and 3 response teams who are trained to NFPA 472 come from fire departments, including the City of Ottawa, strategically located through the province and have entered into partnership with the Office of the Fire Marshal to respond to incidents.

A freight train could block a roadway but the fire department could go through the Town of Smiths Falls to gain access to the other side of the crossing. The Town of Smiths Falls could also be activated under mutual aid.

The VIA passenger train runs daily through the northern portion of the Township and has yet to cause any delays in emergency response.

No history of a blocked railway crossing exists in the municipal history records.

## Demographic Profile

### Montague Population Statistics

Age Characteristics	Total
Total (all persons)	3176
Age 0 – 14	319
Age 15-64	2344
Age 65-greater	513
% of the population ages 15 and over	89.9%

### Montague/Provincial Percentage Comparison

Ages	Montague Total	Montague %	Ontario Number	Ontario%
0-14	319	10%	2,232,750	19.6%
15-64	2344	74%	7,705,130	67.5%
65 and over	513	16%	1,472,170	12.9%

Source – Statistics Canada 2001

The Township of Montague has a significantly higher percentage of residents aged 65 and older than the rest of the province. In addition, the percentage of people aged 15-64 is significantly higher.

An enhanced method of reaching the elderly residents in the township may need to be assessed.

### 4.3 Building Stock

Older buildings pose a different set of problems than newer buildings built to modern construction codes. Commercial occupancies have additional factors to be considered. Construction, occupancy type, water supply, spatial separation between buildings, furniture and furnishings, and the risk that the combination of these factors poses to the occupants are factors in the fire risk of the community.

In the Township of Montague, approximately 97% of all properties are residential. In Ontario over 90% of fire fatalities occur in residential occupancies.

The Township is primary rural in nature with a small urban section known locally as Atironto.

## Montague Occupancy Classifications

Occupancy classification	Occupancy group	# Of Occupancies	% of Total Properties
Group A	Assembly	7	0.55%
Group B	Institutional	2	0.16%
Group C	Single Family	1176	92.89%
	Multi- Unit Residential	45	3.55%
	Hotel/Motel	0	0%
	Mobile homes and Trailers	19	1.5%
	Other	0	0%
Group D	Business and Other Personal	8	0.64%
Group E	Mercantile	1	0.07%
Group F	Industrial	8	0.64%
TOTALS		1266	100%

The consultant has identified a number of high-risk occupancies that should be considered a high priority for inspections by the municipality and they include:

1. Rideau Regional Center
2. Shardon Manor
3. Schools (1 grade school and Section 20 school)

The Rideau Regional Center for the mentally challenged is clearly a high-risk occupancy in the community, particularly due to its size. The hospital accommodates 400 patients plus staff. The Province is scheduled to close this facility in 2009.

The Shardon Manor is a remodeled structure that contains approximately 35 residents and staff. Maintenance of the structure is adequate and it is equipped with a local fire alarm system. Notwithstanding the above, the manor poses a substantial risk in the community due to the number of occupants and the disposition of the occupants.

There is one elementary school and one Section 20 school in Montague Township. The Section 20 school allows a one on one relationship between the student and the teacher.

### 4.4 Municipal Fire Loss Profile

Municipal statistics and OFM statistics were used for analysis and represent the years 2000 to 2004. Emergency response numbers have remained relatively consistent over the 5 year period. The Township has experienced as little as 63 responses (2003 and 2004) and as many as 72 (2002). The average number of responses over the 5 years is 66.8 calls per year.

Annual dollar loss over the 5 year period ranged from \$142,000.00 (2002) to \$447,500.00 (2003), the average annual dollar loss over the review period was

\$241,600.00. This may seem like a large dollar loss and it is but if put it in perspective this is for all fires not just residential structures.

#### Emergency Response Call Volume (2000 - 2004)

Year	# of responses	fires with Loss	fires with no reported Loss	Non fire calls	Estimated dollar loss
2000	66	9	6	51	\$ 290,000.00
2001	70	8	11	51	\$ 328,500.00
2002	72	6	7	59	\$ 142,000.00
2003	63	8	14	41	\$ 447,500.00
2004	63	9	12	42	\$ 194,000.00
Total	334	40	50	244	\$ 1,208,000.00

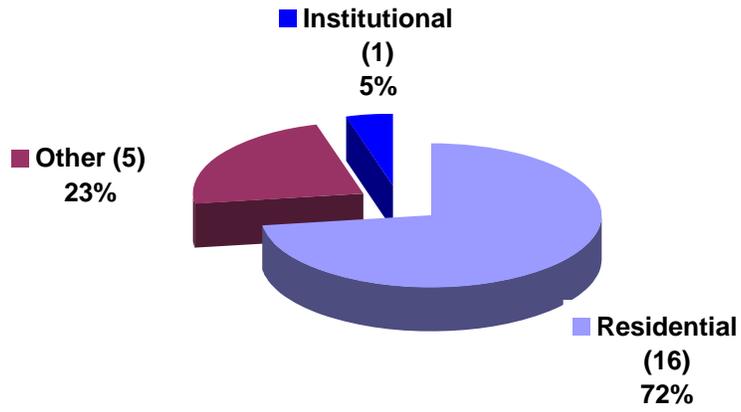
Data was collected from the OFM Data Services records.

The Township of Montague has experienced one fire fatality (2004) over the 5-year review period. The fatality occurred in a single family residential occupancy fire. Results showed that approximately 72.7% of all property class fire related responses were residential occupancies.

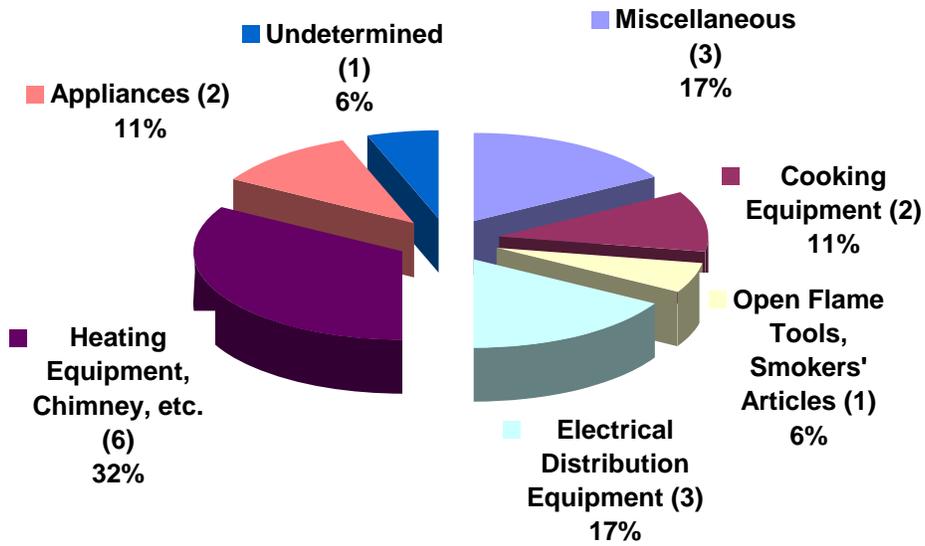
#### Identification of a Fire Trend Related to Property Class

Property Class	2000	2001	2002	2003	2004	Total
Group C Residential	3 60%	1 33.3%	5 100%	3 100%	4 66.6%	16 72.7%
Group B Institutional	1 20%					1 4.5%
Other	1 20%	2 66.6%			2 33.3%	5 22.7%
Total	5 100%	3 100%	5 100%	3 100%	6 100%	22 100%

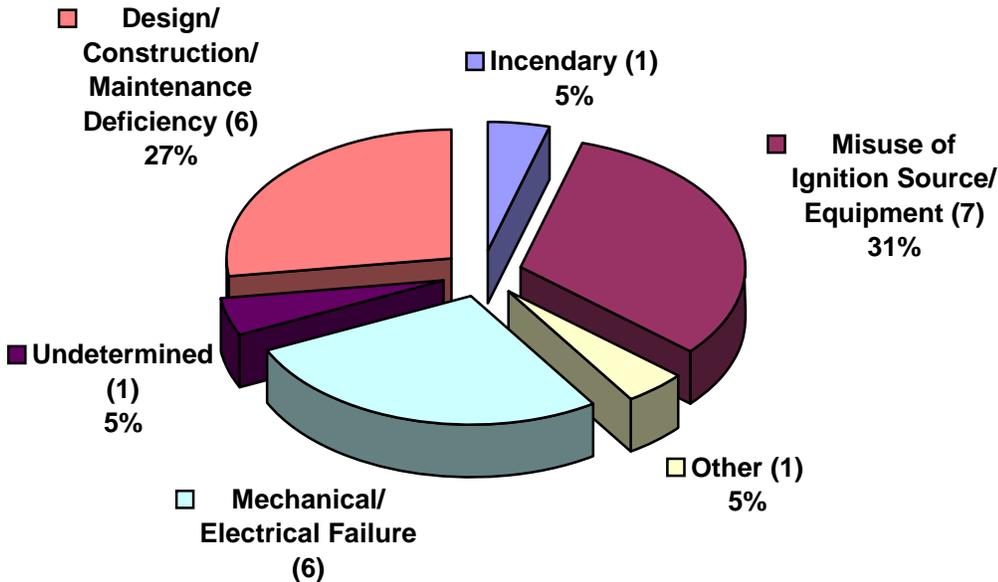
**Municipal Fire Loss:  
Summary of Property Class (2000-2004)**



## Residential Fire Loss: Summary of Ignition Classes (2000-2004)



# Municipal Fire Loss: Summary of Cause (2000-2004)



Due to the low number of incidents in the Township of Montague, statistical analysis of fire loss data is difficult. Montague has suffered one fire related fatality and an average of three structural fires resulting in a loss per year over a five year period. Residential properties pose the greatest risk for fire occurrences and injuries.

## 5.0 Economic Circumstances

The analysis of the economic circumstances of the Township of Montague is based upon information provided by the municipal staff as well as from Statistics Canada and the Municipal Property Assessment Corporation.

### 5.1 Assessment

The assessed value of all properties in 2004 was \$185,128,395.00, in 2005 was \$185,326,800.00. The increase of assessment values in percentage terms is equal to 0.107%.

#### Assessment Comparison 2004 - 2005

<b>PROPERTY CLASS</b>	<b>2004 CVA</b>	<b>2005 CVA</b>	<b>INCREASE (DECREASE)</b>
RESIDENTIAL/FARM	176,310,145	177,897,750	Increase + 0.9%
MULTI RES	N/A	N/A	N/A
COMM-OCCUPIED	6,874,300	5,003,590	Decrease – 27.2%
COMM-VAC LAND	202,210	228,810	Increase + 13.15%
INDUSTRIAL – OCCUPIED	669,125	669,125	Static
INDUSTRIAL – VACANT	368,970	317,970	Decrease – 13.8%
FARMLANDS	9,869,800	9,480,875	Decrease – 3.94%
PIPELINE & MANAGED FORESTS	902,050	1,011,150	Increase + 12.09%

The slight increases and decrease are primarily due to changes in the market value.

The projected development in the next five years is limited to slight. It is anticipated that 25 to 30 new homes will be constructed each year.

### 5.2 Property Classifications

The Ontario Ministry of Municipal Affairs defines Classes of Property in Ontario. There are seven Standard Property Classes. The Township of Montague provides data in three subdivided categories for both commercial and industrial property classes. R-O-W Acres are railway right of way fees paid to the municipality. For the Township of Montague the following information on property classifications has been compiled.

Property Types – Assessed Values and Anticipated Taxes

Property Type	Assessed Value	Anticipated Tax Revenue	% of Total Township Assessment	% of Township Levy
RESIDENTIAL/FARM	\$ 165,701,245	\$ 852,985.27	90.8%	69.68%
MULTI RES	\$ 0	\$ 0.0	0.0%	0.00%
COMM-OCCUPIED	\$ 4,817,300	\$ 37,365.87	2.6%	3.05%
COMM-VAC UNITS	\$ 131,210	\$ 712.42	0.1%	0.06%
COMM-VAC LAND	\$ 71,000	\$ 385.50	0.4%	0.03%
INDUSTRIAL – OCCUPIED	\$ 669,125	\$ 10,712.91	0.37%	0.88%
INDUSTRIAL – VACANT	\$ 73,740	\$ 767.39	0.04%	0.06%
INDUSTRIAL – VACANT LAND	\$ 295,500	\$ 3,075.18	0.16%	0.25%
PIPELINE	\$ 548,000	\$ 4,756.98	0.3%	0.39%
FARMLANDS	\$ 9,869,800	\$ 12,701.74	5.4%	1.04%
MANAGED FORESTS	\$ 354,050	\$ 455.64	0.2%	0.04%
SUPPLEMENTARY TAXES		\$ 23,205.00		1.90%
RAILWAY R-O-W		\$10,832.00		0.88%
OTHER PAYMENTS – IN – LIEU		\$266,115.00	0.0%	21.74%
<b>TOTALS</b>	<b>\$ 182,530,970</b>	<b>\$ 1,224,070.90</b>	<b>100%</b>	<b>100%</b>

### 5.3 Local Improvements

The 2004 municipal budget handles local improvements through funding provided by the municipal tax base

### 5.4 2004 Municipal Actual Tax Levy

The 2004 municipal tax levy is based on the anticipated amount of the total Township levy excluding specific local improvement levies. For the purposes of the review the actual Township levy is based on the total Township levy, minus money collected as part of the education levy.

The total Township levy is \$1,904,544.00 for 2004. The actual Township levy is \$1,224,071.00. This is an increase from 2003 where the actual total tax levy was \$1,199,699.00 - an 2.03% increase.

## Municipal taxation changes from 1999 to 2004

Year	Actual Township Levy	% diff	Education Levy	% diff	Total Levy	% diff
2000	\$ 910,804		\$ 723,831		\$ 1,634,635	
2001	\$ 948,904	+ 4.18%	\$ 652,352	- 9.88%	\$ 1,601,256	- 2.04%
2002	\$ 1,005,714	+ 5.99%	\$ 650,353	- 0.31%	\$ 1,656,067	+ 3.42%
2003	\$ 1,199,699	+ 19.29%	\$ 647,154	- 0.49%	\$ 1,846,853	+ 11.52%
2004	\$ 1,224,071	+ 2.03%	\$ 680,473	+ 5.15%	\$ 1,904,544	+ 3.12%

The wide variance in tax rates supports other evidence that the municipal philosophy on taxation has been “pay as you go” - to pay for large capital expenditures as required and with the use of reserve funds.

### 5.5 Municipal Revenues

The Township of Montague derives funds from a number of sources for the 2004 budget year including taxation, grants, fees and licenses.

#### Breakdown of General Revenues

Department	2004 Actual	2005 Estimate
Non-departmental	\$ 1,070,260.00	\$ 816,994.00
General Government	\$ 5,516.00	\$ 20,100.00
Protection to Persons	\$ 36,296.00	\$ 33,360
Public Works	\$ 47,677.00	\$ 283,000.00
Water Department	\$ 185,632.00	\$ 187,980.00
Waste Management	\$ 36,087.00	\$ 33,150.00
Parks and Recreation	\$ 30,266.00	\$ 13,850.00
Planning and Development	\$ 31,674.00	\$ 26,300.00
<b>TOTAL</b>	<b>\$ 1,443,408.00</b>	<b>\$ 1,414,734.00</b>

The Fire Department does not generate any related revenues.

## 5.6 Reserve Funds

The municipality maintains designated reserves for capital expenditures. Council budgets \$15,000.00 per year for the fire department Reserve Fund. The fire department Reserve Fund, for capital purchases, at the end of 2004 was \$73,708.00. The fire department Reserve Fund for maintaining a consistent special area rate for property owners within the area served by a First Response Agreement, at the end of 2004, was \$17,193.00

The total Municipal Reserve Fund for 2004 was \$1,218,965.00.

## 5.7 Municipal Debt

Montague Township has no long term debt.

## 5.8 Employment Conditions

The 2001 census indicates the unemployment rate for Montague is 3.3% compared to the Ontario average of 6.1%. The average earnings (all persons with earnings) in Montague are \$21,700 compared to the Ontario average of \$24,800.

## 5.9 Fire Protection Costs

The 2004 fire department operating budget is \$135,900 and the 2004 capital budget is \$25,000. The largest expenditure for the fire department in the operating budget is salaries and wages at \$45,600 = 28.34%. The fire fighters are paid on a point system for emergency responses and training.

Montague Fire Department Budget prioritized by Category and in Ascending Order

2004 Budget Item	Amount in \$	% of total	Cumulative
Office Supplies	500	0.31%	0.31%
Hydrant Maintenance	1,500	0.93%	1.24%
Benefits	3,600	2.24%	3.48%
Equipment	4,000	2.49%	5.97%
Office Expenses	4,000	2.49%	8.45%
Fire Prevention	4,500	2.80%	11.25%
First Response Agreement	7,050	4.38%	15.63%
Training Conferences	\$8,000	4.97%	20.60%
Vehicle Expenses	13,100	8.14%	28.74%
Transfer to Reserves	15,000	9.32%	38.07%
Capital Expenses	25,000	15.54%	53.60%
Fire Hall	29,050	18.05%	71.66%
Salaries	45,600	28.34%	100%
<b>Total</b>	<b>160,900</b>	<b>100%</b>	<b>100%</b>

## **5.10 Cost of Fire Department on a per Capita Basis and an Assessment Basis**

The per capita cost of fire services is:

\$50.66 per person = \$160,900 / 3176 (2005 approved operating budget / 2005 MPAC)

The cost per \$1000 of assessment is:

\$0.80/\$1000 of assessment for 2004

\$0.83/\$1000 of assessment for 2003

\$1.09/\$1000 of assessment for 2002

Looking at some of the surrounding municipal fire services for comparison purposes was not beneficial since they are quite different in response areas; number of responses; population; etc.

## **5.11 Economic Circumstances Conclusion**

The percentage of Township expenditures devoted to the fire department in 2004 was 8.3%. Trying to compare costs for fire protection services paid by comparable municipalities is almost if not impossible.

Present funding appears to be adequate in providing the fire department to meet its mandate of providing optimum fire protection. However, with the increasing emphasis for more fire prevention and public education activities may require more human resources.

Appropriate resources should be provided to implement the recommendations outlined in this report and subsequently maintain them.

The fire department budget should differentiate between fire and public education expenditures.

## 6.0 Capabilities of Existing Fire Protection Services

This review includes an evaluation of the current capabilities of the fire protection services in the municipality. The present fire department model is heavily reliant on the emergency response (suppression) component of the three lines of defense.

Improvements to the present system should be made to the first two lines of defense:

- I. public education and prevention,
- II. fire safety standards and enforcement.

The Establishing and Regulating By-law as amended outlines the following services to be provided by the Montague Fire Department:

- Core Services as amended
- Appointment of qualified persons
- Remuneration of all members
- Duties of the Fire Chief
- Duties of a Deputy Fire Chief
- General administrative duties of the fire department administration
- General duties involving apparatus, equipment and communications
- Prevention, control and extinguishment of fires
- Fire prevention inspections of all classes of occupancies
- Investigations of fire to determine cause and origin
- Training of staff
- Promotional procedures
- Discipline procedures
- Rescue, including auto extrication and shore based water & ice rescue, suppression services and sudden medical emergencies
- Responding to mutual aid calls
- Public education and fire prevention

### **Recommendation # 1**

The Establishing & Regulating By-law needs to be reviewed and replaced with a more current model with the appropriate legislative framework. The *approved* list of core services needs to be reviewed to ensure they meet Councils endorsement.

**Note:** The local Fire Protection Adviser from the Office of the Fire Marshal can assist Council by providing a current sample.

The Fire Chief has expressed his commitment to fire protection and the community's fire safety. The Chief of the department is enthusiastic and dedicated to providing the services he recognizes as being extremely important. Given appropriate organization,

support and guidance the department should have no difficulty in providing an enhanced level of public education and fire prevention. Public education and prevention are extremely important for those areas of the Township that are farther away from the fire stations.

The Establishing & Regulating By-law identifies the duties of the Deputy Fire Chief but no Deputy Fire Chief exists in the department. Without the help of a Deputy Fire Chief the Fire Chief will be overwhelmed and the administration of the department will falter. However, the Fire Chief has given some responsibilities to the Captains within the department's operational capability.

**Recommendation # 2**

Council appoints a Deputy Fire Chief.

**Recommendation # 3**

That the Fire Chief establishes an *approved* promotional process to formulate for council the appointment of a Deputy Fire Chief. Filling the position of Deputy Fire Chief would provide the opportunity for succession training.

**Note:** The local Fire Protection Adviser from the Office of the Fire Marshal can assist Council with developing an *approved* process.

**6.1 Administration**

There is a current mission statement for the Montague Fire Department.

**Mission Statement:**

*The mission of the Montague Fire Service is to protect the lives and property of the people of the Township of Montague from fires, natural disasters and hazardous materials incidents and to prevent fires through fire prevention and public education programs.*

A mission statement helps to focus department activities, give context to the department policies and standard operating guidelines, promote a positive approach to tasks and can be useful in developing an effective team.

In By-law # 1000-76 the Fire Chief is responsible:

→ Section 4 – Recommending to Council the appointment of qualified personnel

- Section 6 – Proper administration of the Department including rules for the department, operational guidelines, policies, prevent, control & extinguish fires, enforcement of this by-law, etc.
- Section 9 – General administration of the department
- Section 12 – Responsible for fire prevention and public education
- Section 14 – The *approved* promotional process
- Section 15 – Arranging for medical services
- Section 17 – A process for maintaining discipline

The department has policies (including rules {red book} and regulations) which need to be reviewed and updated. There are also operating guidelines (OG's) to clearly identify responsibilities and the specific actions to be taken to provide the defined services that need revision. The OG's are maintained in the Fire Chief's office in his residence. The fire department has no formal system for the development, use or review of policies and OG's. The fire chief and captains need to meet to review and update the rules of the fire department, the policies and the operational guidelines. The fire chief uses verbal directions and posts some pertinent information on the bulletin board in the association room in station # 1.

The municipal administrative assistant is responsible to the Fire Chief for the provision of support services to the Fire Chief, which includes secretarial, clerical and administrative functions, and actively participates in various projects.

#### **6.1.1 Administrative facilities:**

The fire chief presently maintains an office in his residence to maintain the fire department records, reports, etc.

A computer is provided for the fire chief in the Fire Fighters Association room in station No. 1 of the Montague Fire Department.

The Fire Fighters Association room is also used for training, officer meetings and a place for the fire chief to meet other fire service officials.

Administrative facilities are required to support the operations of all fire departments, regardless of size. The term includes physical building space, within a municipal structure, with support staff and equipment to manage the business aspects of a department within the local government (i.e. telephone, copier, fax, computer, office furniture and clerical support staff). Space and equipment needs will be relative to community and department size.

Administrative facilities are located in municipal office buildings or centrally located fire station to be accessible to the public, the political process and fire department staff. This location provides necessary security and accessibility in the storage of all department records, which are municipal property.

A periodic review process of administrative facilities and services is recommended.

The planning or review process should:

- Analyze the scope of the department needs (present and future)
- Determine space and equipment requirements
- Best location to receive or provide
  - Secretarial support
  - Access to public or political structure
  - Access by other fire department users
- Involve staff especially those at the user level with assistance from other municipal representatives
- Develop design objectives based on required functions and uses of the specific space and equipment
- If clearly stated objectives indicate a major change to an existing building, space or equipment, an architect should be considered

The following chart provides guidance in space allocation and development.

**Suggested space requirements <sup>1</sup>**

Position	Space (square feet)
Chief	192
Deputy Chief	120
Fire Prevention & Public Education Staff	90
Training Staff	90

<sup>1</sup> Fire Station Planning, Design and Construction – R. Ely

**Recommendation # 4**

An office for the Fire Chief be provided in fire station # 1 and all records be maintained in that office.

**Recommendation # 5**

All policies and OG's need to be available in hard copy to the fire fighters.

**Recommendation # 6**

The fire chief and captains should meet regularly to develop, review and revise the policies that are endorsed by council for each area of service provided by the fire department that identifies the level of service expected.

### **Recommendation # 7**

The fire chief and captains should meet regularly to develop, review and revise operating guidelines that provide clear direction to staff on actions necessary to implement policies, establish responsibilities and achieve performance expectations.

#### **6.1.2. Organization**

The fire department is primarily volunteer with the exception of the Fire Chief who is considered part-time:

- 1 fire chief;
- 1 fire captain/training;
- 1 fire captain/communications and maintenance;
- 2 fire captains/suppression;
- 1 fire captain/suppression station # 2; and
- 19 firefighters.

A flow chart showing line and staff authority has been prepared for the department.

#### **6.1.3. Human Resources**

There is no specific job specification for any fire department position. The establishing and regulating by-law and the fire department rules (red book) are the only reference document that captures work related responsibilities of fire department members.

The fire chief has purchased a copy of related Ontario Fire Service Standards for fire fighters, chief officers, training officer, communications officer, mechanical officer, deputy fire chief and fire chief. These are maintained in his office.

Compensation for firefighters is based on a division of funds dependant on individual point accumulation. Points are accumulated for attending training and emergency responses.

The fire department administration has established a process for recruitment and retention of volunteer fire fighters.

The Township of Montague currently only addresses the selection of volunteer firefighters (this is done by means of By-law 1000-76). There is no documented process for promotion, performance evaluation or other matters.

In consideration of concerns noted in the “Emergency Response” section of this report, additional firefighters need to be considered. Increased attention to recruitment and retention policies and processes may become of particular importance to ensure the selection of quality candidates.

The fire chief has a number of responsibilities including those as prescribed in the *FPPA*. A job specification, performance evaluation process and training plan are particularly important for the fire chief's position. The fire department will require significant effort at the management level to implement the recommendations of this report and to effectively manage the fire department. Consequently, a review of the time expectations and compensation is appropriate. Chief Haskins reported that he has a copy of the Ontario Fire Service Standards for a fire chief and that it contains information on the competencies expected of a fire chief.

#### **6.1.4. By-laws and Agreements**

By-law # 1000-76 as amended establishes the Montague Fire Department.

By-law #1929-91 is for the appointment of the current fire chief.

By-law #1156-79 authorizes an agreement with the Village of Merrickville for assistance and the use of fire fighting equipment belonging to Merrickville.

By-law #1862-90 authorizes the agreement with the Township of South Elmsley for assistance in the use of fire fighting equipment belonging to Montague.

By-law # 2765-2004 authorizes an agreement between the Township of Montague and the Township of Rideau Lakes respecting the reciprocal use of fire fighting equipment.

By-law # 1570-86 authorizes and agreement with the Town of Smiths Falls for the provisions of dispatch services by Smiths Falls.

By-law # 1850-90 authorizes an agreement with the Township of Wolford for assistance and the use of fire fighting equipment belonging to Montague.

By-law # 2158-94 authorizes and agreement with the Village of Merrickville for the provisions of fire suppression services to a portion of Montague.

By-law # 1064-77 authorizes the participation of the Township in County Mutual Fire Aid.

By-law # 2628-01 as amended regulates and controls the setting out of fires and the issuing of fire permits.

By-law # 2164-94 authorizes a fire rate on the area served by the Merrickville first response agreement.

By-law # 2112-93 as amended authorizes a fee for the processing of applications for a report in respect of fire matters.

By-law # 2813-2004 authorizes the development of a municipal emergency plan.

By-law # 2693-2002 authorizes a Joint Powers Agreement with the County of Lanark for a 9-1-1 Emergency System.

**Recommendation # 8**

All by-laws should be reviewed to ensure they refer to contemporary enabling legislation.

**Recommendation # 9**

By-laws 1156-79, 1862-90, 1850-90 should be repealed as they authorize agreements with Municipalities that no longer exist due to municipal restructuring.

**Recommendation # 10**

New agreements should be developed and authorized by municipal by-laws for the fire protection services covered by the above by-laws in recommendation # 8.

**Recommendation # 11**

By-law 1570-86 should be repealed as communications and dispatch service are now provided by the County of Lanark.

**6.1.5. Financial Management and Budgeting**

The fire department budget should be based on an annual business plan that identifies measurable achievements and is tied to departmental goals.

Fire department officers have input in the budget process. The fire chief is responsible for specific budget allocations.

Large capital expenditures are typically paid for primarily by funding in a single budget year through reserves.

Purchasing of equipment is done according to municipal guidelines and policies related to tender where appropriate. Accurate records are maintained for current inventory of equipment and supplies. For example, the equipment lists for equipment kept on fire apparatus are an accurate reflection of the actual equipment present.

**6.1.6. Records Management**

Management of records is essential to effective operation of the fire department. Fire department records may be contained in written documents, computer systems and other formats. Complete and accurate records are needed to enable effective service delivery,

informed decision making, tracking performance, providing a record of fire department decisions and actions essential for fire department accountability, and demonstrating due diligence. Fire department records are municipal records, and therefore subject to the Municipal Freedom of Information and Protection of Privacy Act. There may be significant potential for liability due to the lack of records. Note that the Ministry of Labour has expectations for records management that may have a bearing on firefighter health and safety.

The Montague Fire Department maintains limited records on training, apparatus maintenance, public education activities, and emergency responses. The records are maintained at the fire chief's residence. Regular reports are provided to council on fire department activities or accomplishments on a quarterly basis. Fire department records are hard copy and electronic. The department has one computer and electronic record keeping is being initiated.

Steps are being taken to expand the electronic record keeping including the ability to access response information from dispatch.

The municipal retention by-law is presently under review and revision.

The current records management system has the following shortcomings:

- Fire department records are being maintain in two different locations; easy retrieval is not always possible
- Fire department records are not as thorough as they could be

#### **Recommendation # 12**

All fire department records be maintained in the fire station.

#### **Recommendation # 13**

That a comprehensive record management plan be developed to cover administration, communications, apparatus & equipment, fire prevention & public education, training.

### **6.1.7. Disaster Planning**

The Township of Montague has an emergency plan authorized by by-law # 2813-2004 that was initially developed and approved by council October 5, 2004. The fire chief has been designated by council as the Community Emergency Management Co-ordinator (CEMC) in the emergency plan. The fire chief or designate is a member of the municipal control group (MCG). The municipality conducted a tabletop exercise in the fall of 2005.

The municipality has completed the HIRA (Hazard and Risk Assessment and Infrastructure Identification) under the Emergency Management Act.

The Fire Chief, or designate is responsible for:

- A) Activating the emergency notification system.
- B) Providing the Community Control Group with the information and the advice on fire fighting and rescue matters.
- C) Establishing an ongoing communications link with the senior fire official at the scene of the emergency.
- D) Initiating Mutual Aid as required.
- E) Determining if additional or specialized equipment is required i.e. Protective suits, Chemical, Biological, Radiological, Nuclear team (Haz-Mat), etc.
- F) Co-ordinating or providing assistance with rescue, first aid, casualty collection, evacuation, etc.
- G) Providing an Emergency Site Manager as required.
- H) Maintaining a personal log.

#### **6.1.8. Master Fire Planning**

The municipal council has committed to the development of a Master Fire Plan subsequent to the receipt and approval of this Municipal Fire Protection Review.

## **6.2 Emergency Response**

The third line of defense is the emergency response by the fire department. This has been the primary role of the fire department and is a component in the delivery of fire protection services.

The fire department responds to the following identified emergencies:

- Fires – structures, grass or vehicle
- Motor vehicle collisions
- Medical emergencies (limited to lift assists and providing CPR)
- Hazardous materials emergencies (awareness level)
- Level III, water and ice rescue
- Mutual aid to surrounding municipalities when requested
- Public/Police assistance calls
- Rural search and rescue

Multiple and/or simultaneous incidents are handled by activation of mutual aid if required. Hazardous materials and water/ice rescue responses are established services in the establishing and regulating by-law. The risk assessment suggests that hazardous materials incidents and water/ice rescue emergencies are probable situations that the fire department may be called upon to deal with.

The fire department is listed in the municipal emergency plan as a responding agency to incidents that have strong potential to involve hazardous materials. In the event of a hazardous materials incident the fire department would be called upon to respond and be expected to perform to an awareness level. Some fire department members have attended a basic hazardous materials familiarization seminar with content similar to the self-directed learning course developed by C. P. Rail.

Specialized assistance is available through both mutual aid and the Province of Ontario. Level 2 and 3 response teams who are trained to NFPA 472 come from fire departments, including the City of Ottawa, strategically located through the province and have entered into partnership with the Office of the Fire Marshal to respond to incidents.

The fire department does presently provide emergency services in the event of water/ice rescue emergencies. The fire department does train firefighters to deal with water/ice rescue emergencies to level III.

### **6.2.1. Emergency Operations**

#### **Staffing Analysis**

We would like to refer to the Public Fire Safety Guidelines published by the Office of the Fire Marshal on March 4, 2005, that deals with Optimizing Rural Emergency Response (PFSG 04-08A-03).

The subsequent chart is taken from PFSG 04-08A-03 and illustrates the primary functions and related tasks normally associated with a response to structure fire in a single-family two-storey dwelling prior to flashover. <sup>1</sup>

Function	Staff
Command	1
Pump operator	1
Search & rescue or limited firefighting <ul style="list-style-type: none"> <li>one of these firefighters also makes hydrant connection where applicable</li> <li>depending on the circumstances, additional resources will be required to secure and maintain a transported or static water supply</li> </ul>	2
Back up protection – inside <ul style="list-style-type: none"> <li>confine and/or contain fire that impacts on safety of rescue/trapped persons</li> </ul>	2
Outside – RIT team <sup>2</sup> <ul style="list-style-type: none"> <li>exposure protection/laddering for 2nd point of egress <sup>3</sup></li> </ul>	2
1 ventilation team <ul style="list-style-type: none"> <li>raise ladder &amp; use equipment</li> </ul>	2
<b>Total:</b>	<b>10</b>

<sup>[1]</sup> Flashover is a condition that occurs as materials first ignited progress to a state where all combustibles in a room or area are simultaneously engulfed in fire.

<sup>[2]</sup> RIT is a “rapid intervention team” i.e. firefighters available to provide back-up protection to other firefighters in places of danger.

<sup>[3]</sup> Appropriate operations carried out, based on situation. Consistent with Ministry of Labour, Health and Safety Guidelines for the Ontario Fire Service, these firefighters (RIT) cannot be breathing air from their self-contained breathing apparatus.

It is recognized that certain types of occupancies may require differing responses. For example, higher risk occupancies such a low-rise residential, nursing and retirement homes and large assembly occupancies (i.e. schools, arenas and seasonal campgrounds) and in the rural area, farm building fires will necessitate increased staffing levels to accomplish all necessary emergency scene tasks in an effective, efficient and safe manner.

Also required at all working fires is an Incident Safety Officer that assists the Incident Commander with size-up and building construction, reading the smoke, predicting fire extension and fire fighter safety.

We now have a recommended number of fire fighters for a single family dwelling fire. A review of fire response reports and attendance documents provided the following information. The review looked at the years 2000, 2001, 2002, 2003 and 2004.

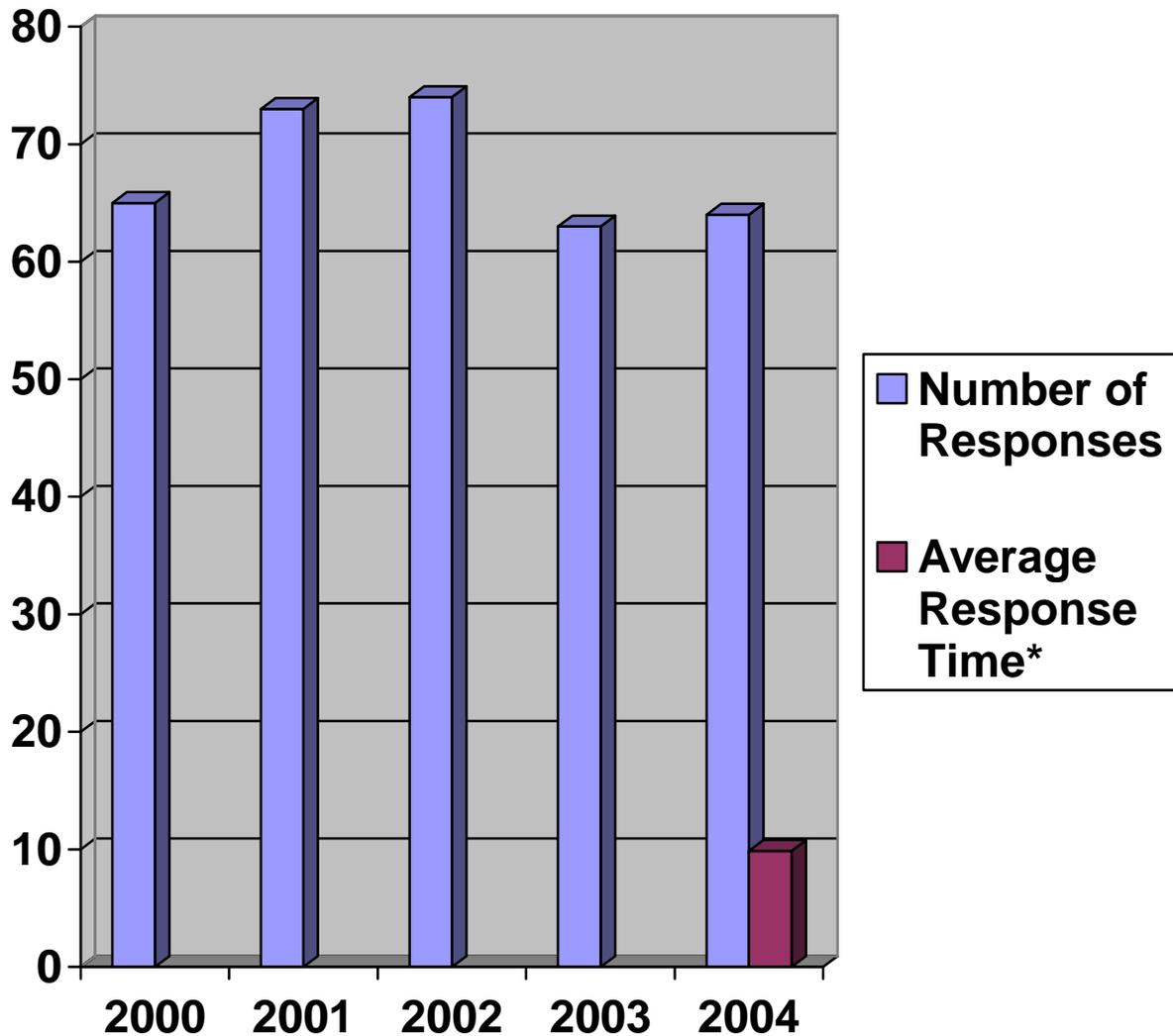
We have created a number of charts to try and show the strengths and weaknesses of the department. Consideration has been given to daytime and responses at night, minimum and maximum number of fire fighters responding from the initial call. Also we have tried to give an average response time which is calculated from the time of the page to the time the first apparatus arrives on the scene.

Note: Response time includes getting up and getting dressed or leaving place of employment, driving to the fire station, donning the bunker gear and driving the fire truck to the scene.

The Township is testing the feasibility of a second fire station in an attempt to reduce response times in the urban area. This station is a rented facility and equipped with a pumper. A number of existing fire fighters reside in the area of the second station. This should allow the department to meet the 10 and 10 guideline, 90% of the time for urban responses.

If this second station becomes permanent then council may have to consider additional volunteer fire fighters to adequately staff this station.

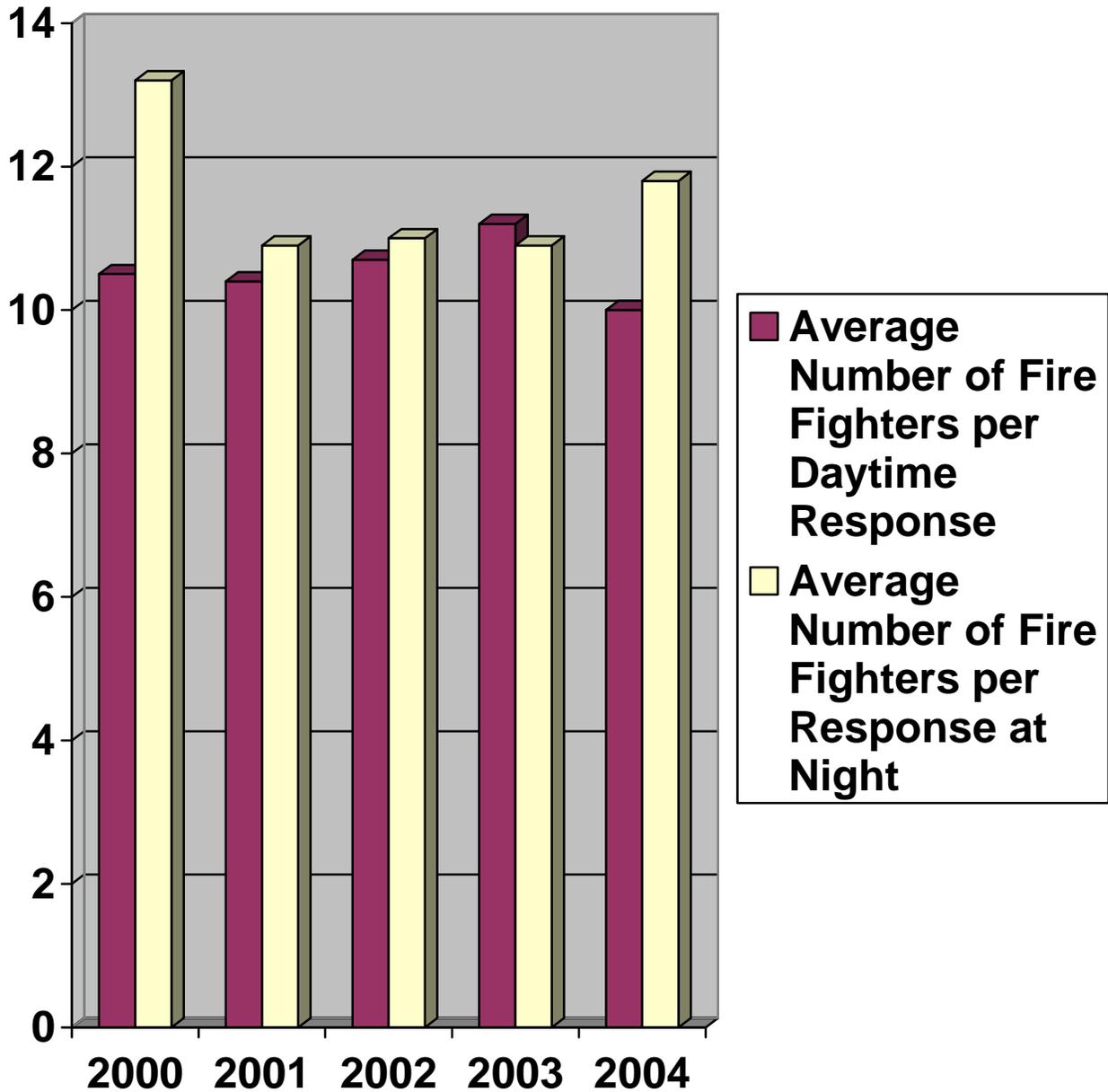
This chart shows the total number of responses the department responded to each year.



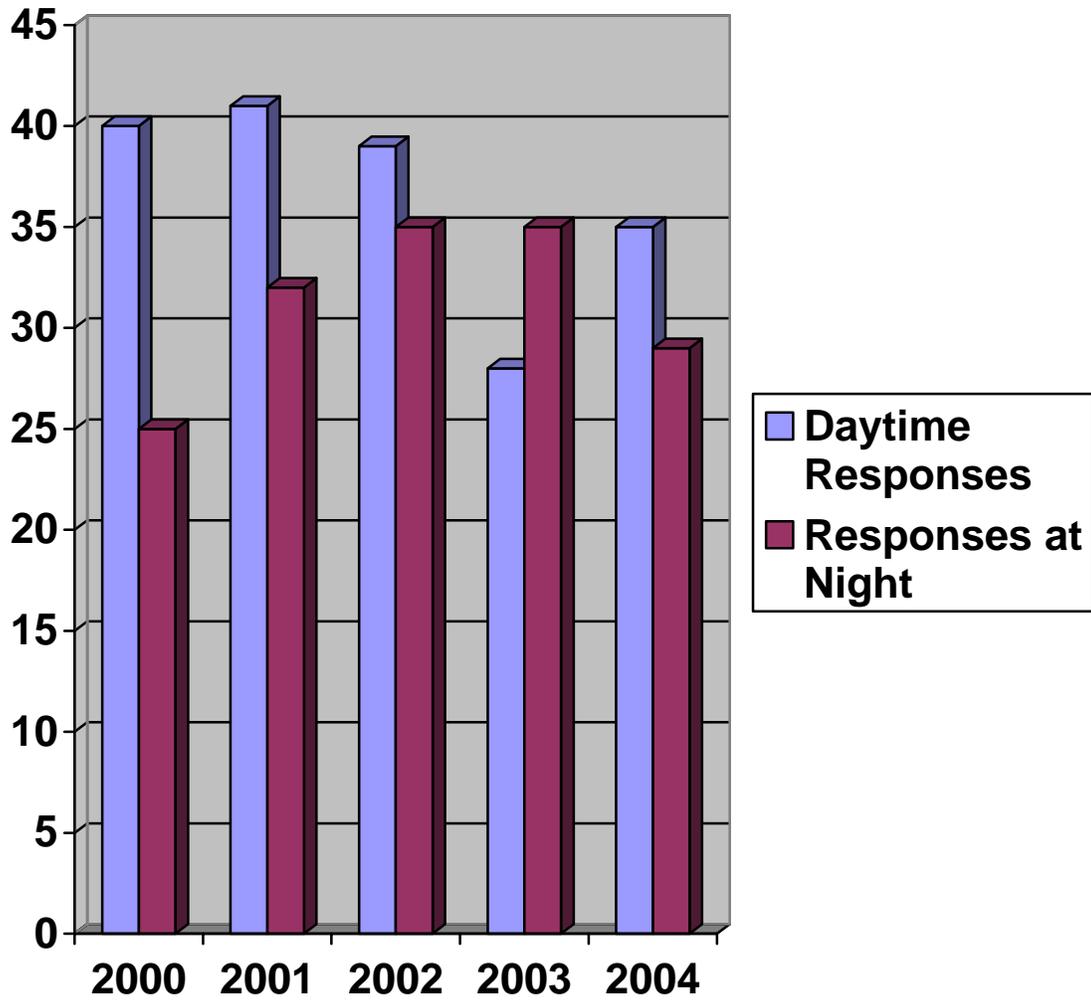
**Note:** The “Number of Responses” is in actual numbers, while the “Average Response Time” is in minutes.

\* Average response time is only listed in 2004 because that was the first year that this information was recorded. As this Report is updated, the following year’s average response times will be included.

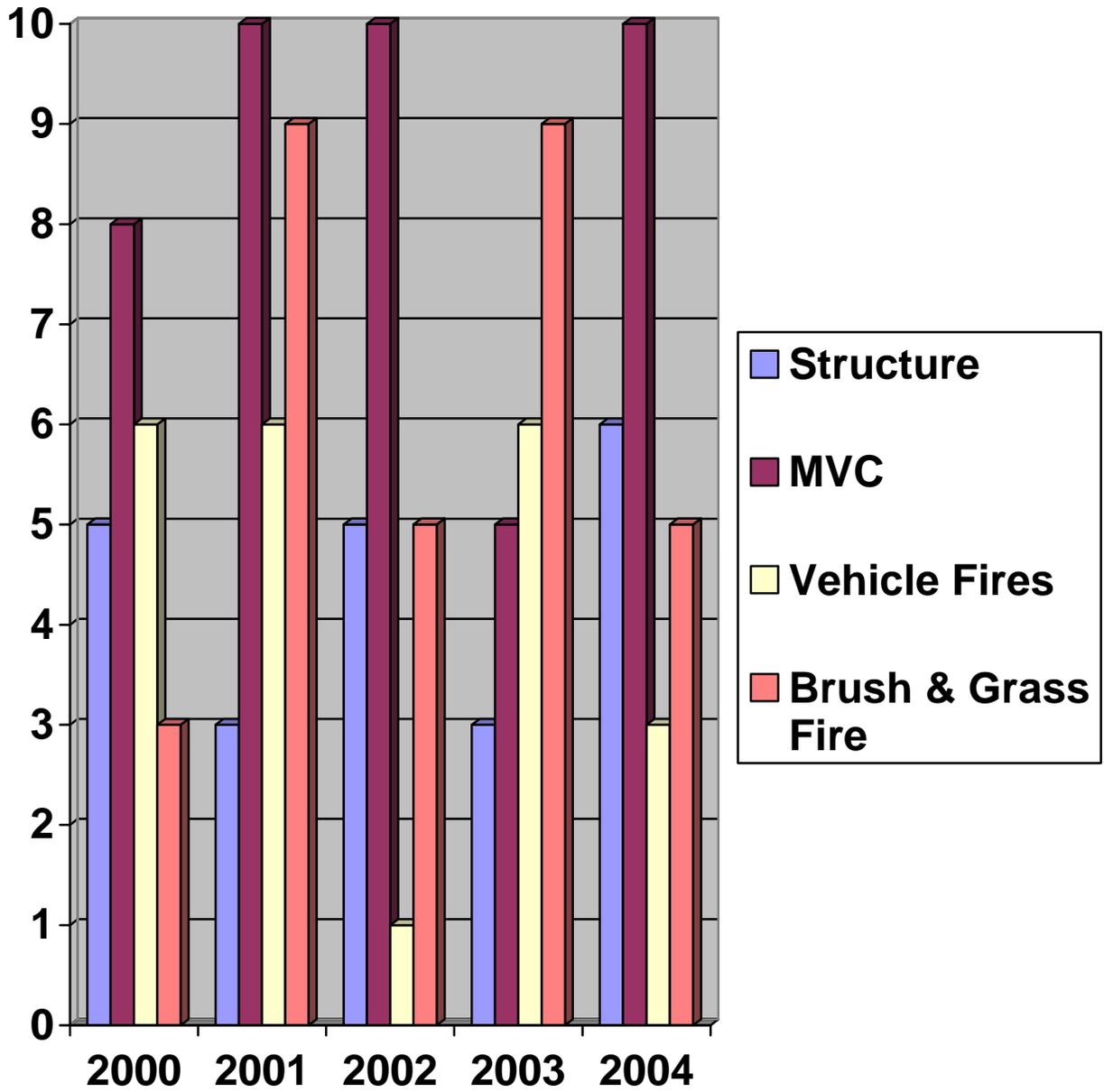
This chart shows the average number of fire fighters responding to emergency calls. This does not include ambulance lift assists or police assistance calls.



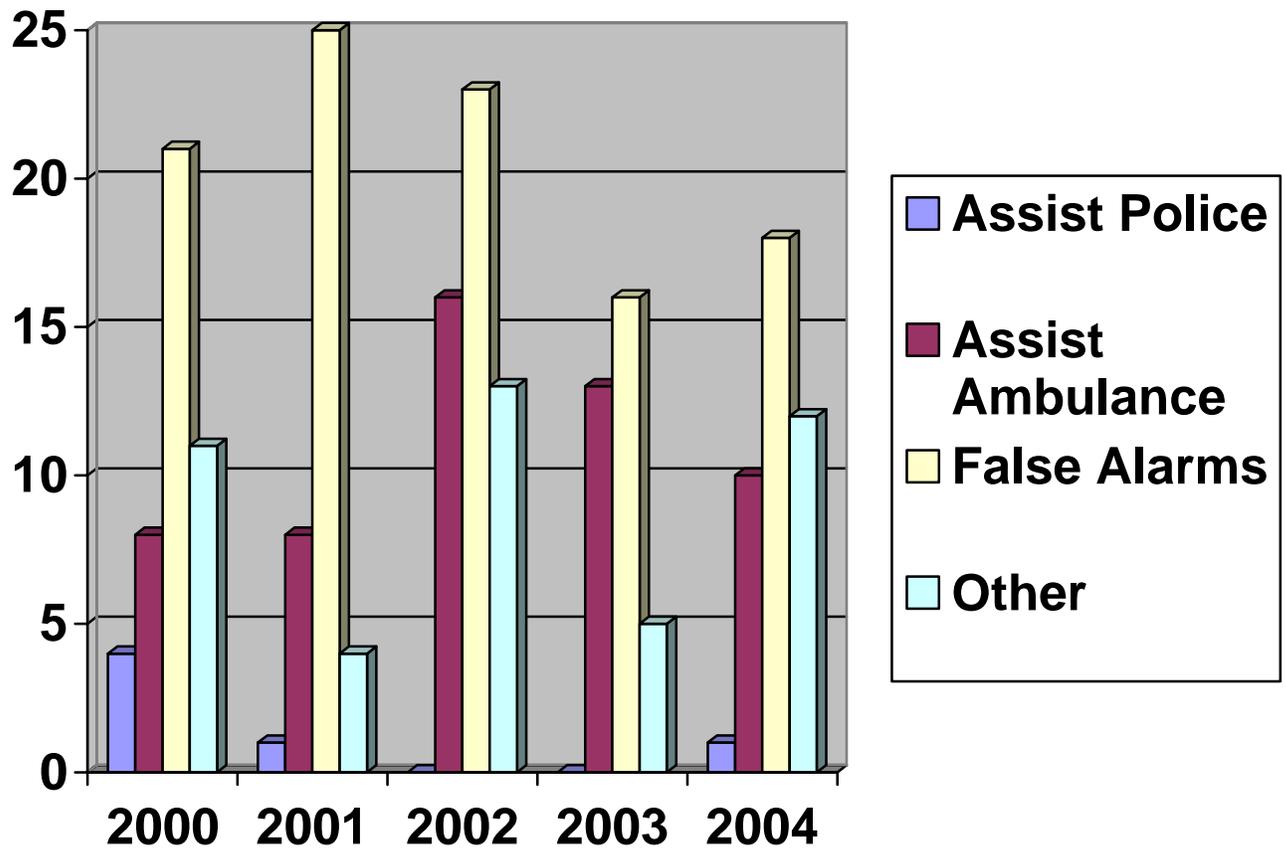
This chart shows the number of daytime responses versus responses at night.

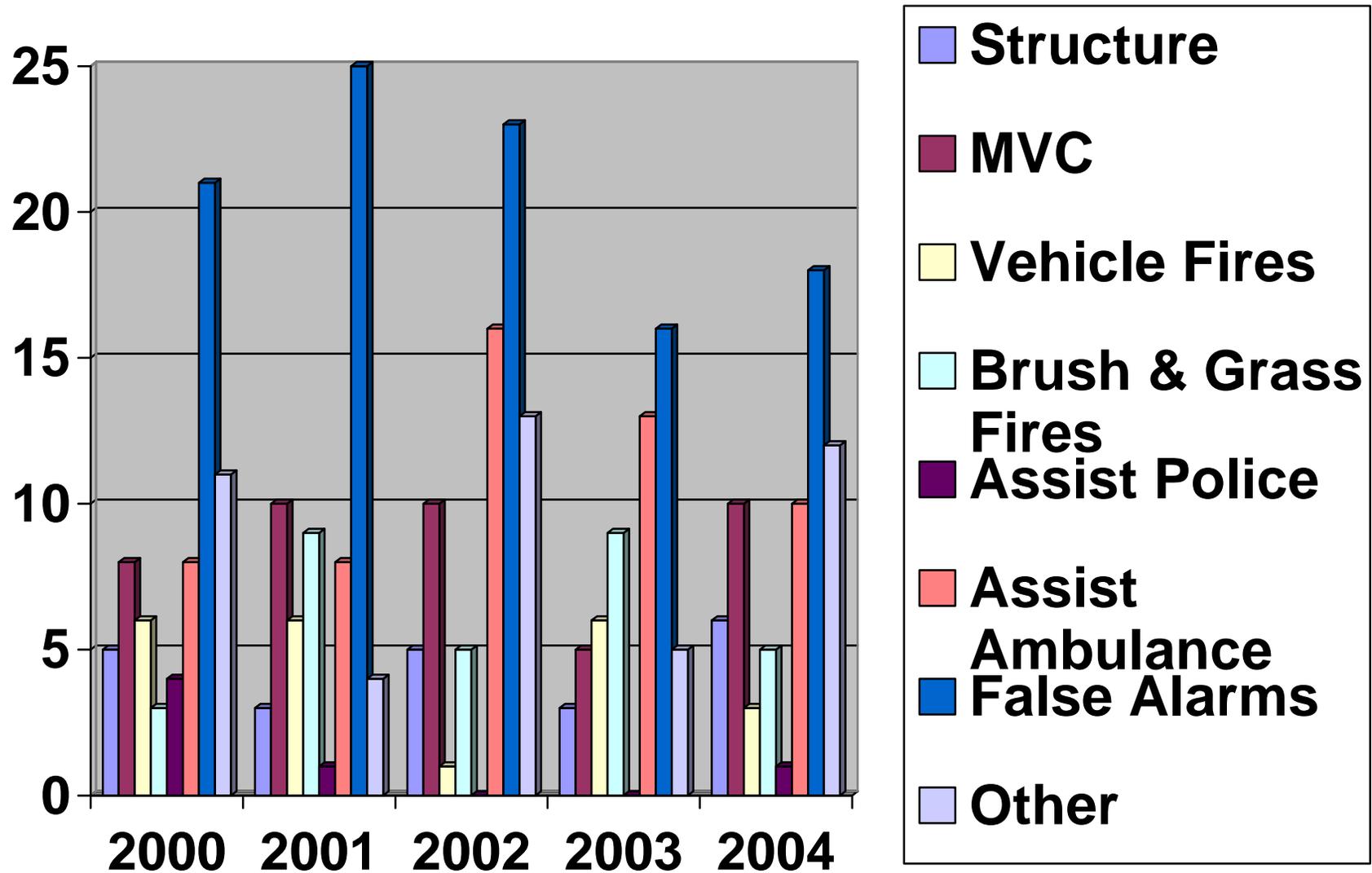


This chart shows the type and number of emergency responses for the department.



The department also responded to other calls for help as listed below.





This chart shows all of the responses for the Montague Fire Department

911 calls are received by the Ontario Provincial Police in North Bay and then forwarded to the Smiths Falls Fire Department Communications Center. All dispatch functions are handled by Smiths Falls Fire Department Communications Center under a written agreement with the County of Lanark. The County of Lanark has entered into a Joint Powers Agreement with the Corporation of the Township of Montague. The agreement is authorized by by-law # 2693-2002.

Dispatch services are provided by Smiths Falls Fire Department for initial page out and all future communication requirements. All firefighters are paged for every incident type and are expected to respond. The designated drivers respond to the fire stations and ensure that all appropriate apparatus responds. The non designated drivers respond directly to either the emergency scene or the fire station whichever is closer. Two fire fighters assemble at the stations and get their turn out gear, they respond to the emergency location with the pumpers. The next two take the tanker followed by the equipment van with a driver and then the creek truck with a driver.

The only modified response protocols are for auto extrication calls outside of the Township of Montague and for a mutual aid tanker only request. For extrication calls outside the municipality, the first three firefighters arriving at the fire hall respond with the County extrication unit. A request for a mutual aid tanker only, the first two fire fighters to arrive at the hall respond with the tanker. The fire department responds occasionally to medical emergencies only when an ambulance requires a lift assist. Firefighters presently receive training in standard level first aid and CPR to be able to respond to medical emergencies equipped with the basic level of skill required.

**Recommendation # 14**

If and when the second fire station becomes permanent then Council should consider increasing the number of volunteer fire fighters in the department.

**6.2.2. Incident Management System**

Incident management is a standardized approach to emergency management that ensures a consistent approach to decision-making, incident priorities, and life-safety for responders and the public. Without an effective incident management system, there is limited on-scene accountability and coordination, individual firefighters may not operate as an effective team, and firefighter safety may be jeopardized.

The Montague Fire Department does have written operational guidelines to address incident management procedures and firefighter accountability. Incident management and fire fighter accountability is not being practiced at all emergency scenes. Effective incident management is required to ensure safe and effective fire suppression and to ensure compliance with the Ministry of Labour Firefighter Guidance Notes.

The department presently operates with five Captains in addition to the fire chief. Two of the captains have 30 years experience each with the department (15 years each as an officer); one has 20 years experience with the department (14 years as an officer); one has 10 years experience with the department (4 as an officer) and one has 20 years experience with the department (1 as an officer).

The department is currently seeking to conduct an OFM field level incident management course for its officers and fire fighters.

A copy of all operational guidelines has been placed in Fire Station # 1 for the perusal of the fire fighters.

**Recommendation # 15**

Develop and implement an incident management policy. Train staff to carry out the expectations identified in the standard operating guidelines and evaluates incidents to ensure effective incident management.

**6.2.3. Automatic Aid and Mutual Aid**

The Township of Montague participates in an “Automatic Aid Agreement” with the Village of Merrickville for a designated portion of Montague Township. This agreement is outlined in By-law # 1064-77.

The fire department is authorized to participate in mutual aid under by-law # 1064-77. Note that the by-law authorizing participation was passed in 1977. Consideration should be given to updating the bylaw in accordance with current legislation as previously stated.

**Recommendation # 16**

The fire protection agreement needs to be revised to show the new municipality of Merrickville-Wolford.

**Recommendation # 17**

Develop an operating guideline outlining situations where mutual aid is to be activated.

**6.2.4. Pre-Emergency Planning**

Planning should be done to ensure that unusual or higher risk properties such as the nursing home and schools are provided with appropriate emergency responses. Information related to building layout and construction, hazardous materials, expected

fire loads and exposures, vulnerable occupants, building fire safety systems and emergency contacts can be collected and used to plan for emergency response. Barriers to timely and effective response should be identified.

The fire department does some pre-emergency planning for institutional and assembly occupancies within the municipality. These pre-plans are mainly discussions at training meetings and site visits. The process is not formalized and written plans are not prepared or revised according to a schedule. Plans are of little value to firefighters if they are not available at the emergency incident.

In developing and implementing pre-emergency plans, the fire department should consider the following requirements:

- Approved and current fire safety plans for all facilities where required;
- Availability of Workplace Hazardous Material Information System and Material Safety Data Sheets;
- Appropriate personnel, equipment, and training for each high risk occupancy;
- Direct communication capability for all emergency responders involved
- Practice and evaluation of the plans that are not limited to table top exercises;
- Unified incident management for all responding agencies;
- Determine, in conjunction with property owners, what are the high-risk areas and what is required to mitigate a fire or hazardous material incident, including assessing appropriate water supply; and
- Contingency planning to accommodate occupants of affected occupancies.

**Recommendation # 18**

Delegate responsibility for the development, updating, maintenance and proper distribution of pre-emergency plans to an individual officer for institutional and assembly occupancies in the municipality.

**Recommendation # 19**

Establish a process to review and revise the pre-emergency plans and create new ones as necessary.

**Recommendation # 20**

Maintain copies of all pre-emergency plans on the fire apparatus.

### **6.2.5. Water Supplies**

The fire department relies on hydrants in the urban area for its water and is capable of carrying water in the tanker for the rural area. Additional water supply, if needed, is available through the mutual aid system.

The Office of the Fire Marshal raised the question of “does the fire department have sufficient pumping capacity and water supply capacity to extinguish fires in the community” The OFM requested that we use the NFPA Standard 1142, Standard on Water Supply for Suburban and Rural Fire Fighting.

The pump and water tank sizes are located in the apparatus section of this report.

The Standard looks at structures that are fully involved in fire, possible exposures and the amount of water required for total extinguishment.

WATER SUPPLY REQUIREMENTS AS PER NFPA 1142  
(Standard on Water Supply for Suburban and Rural Fire Fighting)

1. A Typical Community Hall (Civitan Club):

Civic Address 12468 Highway 15  
Length 28 m  
Width 22 m  
Height 3 m  
Exposures Nil  
Water Supply Required 6,992 gallons

*In order to meet the requirement an additional tanker from Smiths Falls would be utilized if required.*

2. A Typical Single Family Home:

Civic Address 6575 Roger Stevens Drive  
Length 12 m  
Width 8 m  
Height 3 m  
Exposures Nil  
Water Supply Required 2179 gallons

*No additional resources required*

3. A Typical Clubhouse (airport)

Civic Address 102 Van Exan Drive  
Length 16 m  
Width 10 m  
Height 3 m  
Exposures Nil  
Water Supply Required 1816 gallons

*No additional resources required*

4. A Typical Aircraft Hanger:

Civic Address 102 Van Exan Drive  
Length 12 m  
Width 15 m  
Height 6m  
Exposures Nil  
Water Supply Required 2724 gallons

*No additional resources required.*

5. Health Care Facility (Shardon Manor):

Civic Address 3249 Highway 43 East  
Length 48 m  
Width 11 / 27 m  
Height 6 m  
Exposures Nil  
Water Supply Required 41,272 gallons

*In order to meet the requirement additional tankers from Smiths Falls, Merrickville Wolford and Beckwith would be utilized if required.*

6. A Box Store (National Grocer):

Civic Address 101 Rideau Avenue  
Length 40 m  
Width 30 m  
Height 4 m  
Exposures Nil  
Water Supply Required 23,837 gallons

*In order to meet the requirement an additional pumper from Smiths Falls would be utilized to relay pump from the hydrant on the corner of Cornelia and Rideau using 100 mm hose if required.*

7. A School:

Civic Address 1200 Rosedale Road South  
Length 85 m  
Width 27 m  
Height 3 m  
Exposures Nil  
Water Supply Required 26,050 gallons

*This school has a 20,000 gallon in ground water storage tank and if required tankers from Smiths Falls, Ottawa and Beckwith would be utilized.*

8. A Restaurant (Angelo's)

Civic Address 12027 Highway 15  
Length 14 m  
Width 22 m  
Height 6 m  
Exposures Nil  
Water Supply Required 5,784 gallons

*In order to meet the requirement additional tankers from Smiths Falls and Beckwith would be utilized if required.*

1. Sources

Treated water is supplied from the Rideau River for all the hydrants in Atironto and at the Rideau Regional Centre.

2. Alternate Supplies

Alternate supplies are manual pumping directly from the Rideau River, quarries, local streams and tributaries using the Montague fire apparatus. Mutual aid tankers are available on request from Lanark County or Leeds & Grenville County or the City of Ottawa.

**Note:** The Montague Fire Department responds to reported structure fires with all the apparatus that is identified below in Section 6.6. The responding apparatus carries 3,200 gallons of water and a pumping capacity of 1890 gallons per minute for initial attack plus the addition of Class "A" foam which greatly reduces the amount of water required to extinguish a fire.

Additional water supplies are only a radio call away if required.

### 3. *Private Water Supplies and Systems*

The Montague Public School at 1200 Rosedale Road, South has its own supply of twenty thousand gallons of water in an underground storage tank. This water is available to the fire department on an as needed basis.

### 4. *Hydrants*

4.1 **Public Hydrants:** The Township of Montague has 21 hydrants which are tested and colour coded (NFPA 21—*Fire Flow Testing and Marking of Hydrants*”).

Regular maintenance is contracted out and performed annually. The hydrants are tested as per the N.F.P.A. which includes the following tests: static, flow, colour code (red 0-500 gallons, orange 500-1,000 gallons, green 1,000-1,500 gallons and blue 1,500 gallons and over). All Township hydrants are flushed in the spring to monitor any maintenance requirement.

The hydrants are all in the urban area of the Township and are fed from the Town of Smiths Falls water system via a 6 inch water main.

4.2 **Private Hydrants:** Private hydrants at the Rideau Regional Center are the owners' responsibility. The Town of Smiths Falls maintains these hydrants by contract.

4.3 **Dry Hydrant:** A dry hydrant has been installed in the municipality opposite 161 Code Drive.

### 6.3 **Fire Prevention**

The *Fire Protection and Prevention Act, 1997* establishes the responsibility for municipalities to provide fire prevention and public education programs. The minimum acceptable model for these programs is:

- simplified risk assessment;
- smoke alarm program and home escape planning;
- distribution of public education information and delivery of public education programs
- provision of inspections upon complaint or request.

The municipality has set the requirements to conduct fire prevention programs in the Establishing and Regulating By-law. There are no other policies or guidelines with respect to fire prevention activities. The by-law indicates eight responsibilities under fire prevention:

- I. Conduct fire prevention inspections of premises
- II. Enforce fire prevention By-Laws

- III. Examine building plans
- IV. Provide personnel for fire prevention lectures
- V. Establish and maintain photography facilities
- VI. Maintain fire loss records
- VII. Receive, process and follow up reports of fire prevention inspections conducted under the division of firefighting
- VIII. Prepare the annual report and budget of the Division of Fire Prevention to be submitted to the Division of Administration.

Chief Haskins has taken the basic fire prevention course from the Office of the Fire Marshal. The chief is responsible for the development, delivery and administration of all fire prevention and public education programs. The fire department members also provide assistance with public education and the smoke alarm program.

The fire department conducts and delivers several fire prevention and public education activities, however, as noted; there are no policies or guidelines in place to provide direction or performance objectives. Records of public education activities are in need of some minor improvements. A comprehensive record program of public education activities should include the number of persons in attendance; subject material; age groups attending; date & time spent; those who assisted the chief from the department; etc.

#### **Recommendation # 21**

The fire department should develop, for council's approval, a fire prevention policy statement and a fire prevention policy.

#### **Recommendation # 22**

The public education activity records be improved.

### **6.3.1 Municipal Fire Protection Information Survey**

A Municipal Fire Protection Information Survey (MFPIS) was conducted as part of the review process on January 31, 2006 with OFM Program Specialist Kirk Parsons.

The purpose of the survey is twofold:

- To assist municipalities in complying with the requirements for fire protection services, as directed by the *Fire Protection and Prevention Act, 1997* and
- To enable the Office of the Fire Marshal to meet its responsibility for monitoring the levels of fire protection services in Ontario, as required by the FPPA.

The Township of Montague was able to demonstrate that it met the minimum acceptable model through the MFPIS process. Improvements made by the fire department during the review have contributed to achievement of compliance with the minimum acceptable model and Section 2 1(a) of the *Fire Protection and Prevention Act, 1997*. The fire department completed a simplified risk assessment and added a home escape planning component to an existing smoke alarm program. Documentation of inspections is satisfactory and a systematic follow-up inspection process is in place.

The Township of Montague Council was presented with a Certificate of Compliance issued by the Office of the Fire Marshal on April 18, 2006.

### **6.3.2 Fire Prevention Inspections**

A successful inspection program requires that inspections be performed competently and in a planned and systematic manner. Adequate human resources are required for a successful inspection program. An effective fire inspection program would include:

- Responding to complaints and requests
- Identifying risk occupancies and the type of inspections to be conducted. For example: routine inspections of all multi-unit residential buildings, retrofittable occupancies, new construction inspections of all buildings, smoke alarm checks of single family residential buildings
- Setting the methods of inspection appropriate for the circumstance. This will have implications for time required to inspect, as more comprehensive inspections require more time
- Establishing the category of buildings being inspected and the skills and knowledge required to inspect them. The more complicated the building, the more skill and knowledge required; and
- Establishing the frequency that the properties will be subject to inspection.
- Conducting routine inspections, including reporting violations
- Follow-up to achieve compliance
- Fire safety plan review and approval
- Supervisory duties (directing, monitoring and evaluating);

The fire chief conducts inspections on a request and complaint basis. The fire chief also uses the Office of the Fire Marshal's Assist to Inspect program if deemed appropriate. The fire chief conducts random smoke alarm checks and home escape planning during inspections.

Any inspection conducted must include notification of the property owner or responsible person and appropriate follow-up with enforcement, if necessary.

The fire department is involved with plans review and the approval processes. The fire chief has not been appointed as an inspector under the Building Code Act. Appointing the fire chief as an inspector under the Building Code Act provides him with same liability protection that the building inspector is provided with.

Fire safety planning is an important component of a fire prevention program. While the fire chief does have copies of fire safety plans in his files for the high risk occupancies within the community. It would be advantageous if a copy of all fire safety plans were available in the fire stations for the suppression crews.

**Recommendation # 23**

Appoint the fire chief as an Inspector under the Building Code Act.

**Recommendation # 24**

Provide copies of all fire safety plans in the fire stations.

**6.3.3. Public Education Information/Programs**

Fire safety education is provided to residents in a number of ways. Material is distributed to residents consistent with the community’s needs and circumstances by a combination of the following activities:

- distribution of pamphlets or other education material;
- distribution of the Lanark County Plan Ahead calendar;
- public service announcements utilizing the available media;
- instruction to residents/occupants on fire safety matters;
- delivery of S.A.F.E. program (newborn baby basket);
- delivery of programs such as Smoke Alarms, Older and Wiser, Risk Watch;
- presentation to resident groups; and
- attendance at public events.

The MFPIS survey helps municipalities identify issues needing attention such as preventing fire occurrence, the value of smoke alarms, planning escape from fire, and being prepared to deal with a fire incident. The Office of the Fire Marshal, District Office can provide assistance with fire safety education material for the public. Fire safety education information may also be found on the OFM website. ([www.ofm.gov.on.ca](http://www.ofm.gov.on.ca))

The Montague Fire Department does provide fire safety education. The department is an active participant in the Lanark County Fire Prevention and Public Education committee.

**6.3.4. Fire Investigations**

The Standard Incident Report (SIR) must be completed in full for all emergency responses and additional information gathered to help evaluate the effectiveness of fire department programs. The information gathered at fire scenes is essential to understand a community’s

fire losses. Improvements in fire fighting, legislation, equipment, education, construction and other factors that affect fire safety are dependent on fire incident evaluations.

The fire department does conduct post-incident evaluations at their next training meeting but it is not formalized. The fire department does conduct basic origin and cause investigations of fires and reports the findings on the OFM standard incident report. Only the fire chief has received training in fire origin and cause determination.

### **Recommendation # 25**

Develop and implement standard operating guidelines for post incident evaluations at all fire occurrences, and ensure appropriate training be provided to other fire department officers such as the Fire Cause Determination course.

## **6.4 Communications**

The fire department communicates using a two-way radio system that consists of seven (7) mobile truck mounted radios and seven (7) portable radios issued to officers as well as eight (8) spare portable radios kept on the apparatus. Radios work well within the Township limits. All fire communications in Lanark County is on one (1) frequency allowing communication between neighboring fire departments for mutual aid calls. Most if not all radios are equipped with the OFM frequency that can be used by the department if necessary.

The firefighters carry a pager and/or a portable radio, which serves to notify them of emergencies. There are no reported problems with this system of notification. The pagers monitor radio communications broadcast on fire department frequency. Calls are acknowledged by an officer using their portable radio.

The Montague Fire Department does have a base radio in the fire fighters association room in the fire station.

911 calls are received by the Ontario Provincial Police in Orillia and then forwarded to the Smiths Falls Fire Department Communications Center. All dispatch functions are handled by Smiths Falls Fire Department Communications Center under a written agreement with the County of Lanark. The Smiths Falls Fire Department Communications Center provides all necessary times and details to the Montague fire department upon termination of the emergency call.

The Smiths Falls Fire Department Communications Center went online in 2005 and handles all fire communication in Lanark County with the exception of the Town of Perth, which has its own dispatch center.

The Smiths Falls Fire Department Communications Center is equipped with emergency back-up power that is load tested on a monthly basis. It uses the ZETRON Communications computer hardware and software. The CAD mapping system is XWAVE.

The County of Lanark and a committee of the Lanark County fire chiefs oversee any issues that involve radio communication difficulties and the reports provided to each fire service.

## **6.5 Training and Education**

Training is based on a training plan created by the fire chief but it is not published. The results of the training are generally documented. Firefighters meet twice per month for training and apparatus checks as well as limited station maintenance. However one of the meetings is to conduct the associations business after the maintenance checks. During the summer months the chief adds some additional training during the longer days and good weather. There is a recruit-training program tied to the Ontario Fire Service curriculum delivered by the fire department trainer/facilitators.

The department utilizes a training complex at the rear of the property for search and rescue training. This serves as a mask confidence builder for the fire fighters. Smoke is inserted into the training maze to create the reality effect.

Other departments utilize this training complex annually.

There is a requirement for firefighters to have an established level of competency when they respond to fires and what activities they are allowed to participate in. The department has three (3) fire fighters that are restricted to driving trucks and operating the pumps. However there is no written operational guideline to address this course of action.

There is no training program or curriculum specifically for senior officers. The fire chief encourages the officers to attend courses, etc. but none of the officers are currently enrolled in the Ontario Fire College Company Officer diploma program. The fire chief has taken the Basic Fire Prevention Course offered by OFM field staff and is trained to an acceptable level to be able to perform fire prevention duties. The Office of the Fire Marshal through the OFC Company Officer diploma program offers an enhanced fire prevention course.

A Company Officer / Fire Prevention Office Legislation 101 course was held in Montague Township on May 28, 2006 with 14 members of the department participating. This is the lead in and a prerequisite course for the Company Officer diploma program.

An Incident Management Course is in the planning stages for the Montague Fire Department in which the Legislation 101 course is a prerequisite. This is often referred to as a specialized field delivered course.

One captain has been designated the training officer. He has successfully completed a Trainer/Facilitator course in 2006 through the Ontario Fire College but has received no special training for his position. Having him belong to and attend the annual Municipal Fire Department Instructors Association would assist him in his position as training officer.

## **Occupational Health and Safety**

All firefighters are issued IFSTA “Essentials of Firefighting- 4<sup>th</sup> Edition” and utilize the standardized firefighter curriculum program developed by the Ontario Fire Service.

The Occupational Health and Safety Act require documentation of training provided to employees and that individual records are maintained for each employee.

The Occupational Health and Safety Act require the department to have a Health and Safety Committee and certified representatives on the employee side of the committee.

The Montague fire service used a company called ICARUS Fire Prevention to put together their Operational Guidelines. On December 14, 2000 the guidelines were completed and forwarded to the Montague Fire Department.

A copy of the approved guidelines will be available in the Association room at fire station # 1.

Twenty eight (28) operational guidelines have been prepared for the Montague Fire Department and they are:

- OG 01 Safety & Health Program
- OG 02 Accountability
- OG 03 Incident Command
- OG 04 Additional Resource Management
- OG 05 Training
- OG 06 Automatic Alarm & Structure Fire Response
- OG 07 Response to Confidential Incidents
- OG 08 Response to MVA's and Other Rescue Incidents
- OG 09 Fire Attack
- OG 10 Response to Calls in Contracted Areas (Right-of-Way)
- OG 11 Standard Signals for Backing Fire Apparatus
- OG 12 Apparatus Placement
- OG 13 Natural and Liquefied Petroleum Gas Leaks
- OG 14 Flammable Liquid Incidents
- OG 15 Respiratory Protection Program
  - Self-Contained Breathing Apparatus
  - General Inspection
  - Donning and Normal Operation
  - Emergency Operation
  - Stand-by Cleaning & Storage

	- Inspection Sheets & Logs
OG 16	Personal Alert Safety System
OG 17	Rescue of Lost or Trapped Firefighters
OG 18	Emergency Incident Rehabilitation
OG 19	Oxygen Equipment
OG 20	Hose Testing
OG 21	Communicable Disease Contact
	- Precautions for Handling Patients
	- Notification of Kin
OG 22	Grooming
OG 23	Identification of Turnout Clothing
OG 24	Personal Protective Clothing & Helmets
OG 25	Personal Equipment Inspection & Cleaning
OG 26	Radio Procedures
OG 27	Hazardous Materials Tactical Guideline
OG 28	Confined Space Guideline

These guidelines need to be reviewed and updated as needed. A committee should be formed to prepare a draft update for the fire chief's approval.

**Recommendation # 26**

A draft annual training program be published and posted in the fire stations annually.

**Recommendation # 27**

An operational guideline be developed and implemented, once approved, to identify a recruit training program and document the training received.

**Recommendation # 28**

The department participates in the Municipal Fire Department Instructors Association and the training officer be encouraged to attend the associations meetings and training seminars.

**Recommendation # 29**

A health and safety committee be established in the department as required by the Occupational Health and Safety Act.

**Recommendation # 30**

The employee representatives be trained and certified as required.

## 6.6 Equipment and Apparatus

Fire fighting apparatus and equipment needs to be regularly maintained and tested at least annually to ensure that they are operating correctly. Inventories of all equipment should be maintained. Lack of an effective program to inventory, regularly maintain and check equipment may result in premature breakdowns, reduced life expectancy of expensive equipment and facilities and the possibility of equipment failure at critical times.

A captain has been assigned the responsibility of ensure the annual DOT inspections are completed and recorded. Annual pump tests are completed in Carleton Place by Seagrave Canada. A monthly maintenance program has been established and is completed by the duty crew. Adequate records are maintained for the maintenance and testing that is done. An up to date inventory is maintained of all equipment.

A firefighter has recently been put in charge of the self contained breathing apparatus (SCBA) maintenance and testing program. He has created an air exchange program within the department. Air cylinders are refilled by the Smiths Falls Department.

The Montague Fire Department owns and operates a fleet of 6 vehicles. The fleet consists of two (2) pumpers, one (1) tanker, one (1) county rescue unit, one (1) equipment van, one (1) creek truck, one (1) chief's car. They also maintain and operate a county rescue unit and a county rescue boat.

The large units are normally in service for a period of 25 to 30 years. The following is a list of the current fleet:

- **Pumper No. 78:** **1995 Freightliner FL80**, five person enclosed cab, built by Fort Gary Fire Trucks and is a first line pumper.
  - Pump Capacity: 5000 L/minute (1050 gallons/minute)
  - Booster Tank: 4500 L (1000 gallons)
  - Foam Tank: 22.7 L (5 gallons) of Class "A" foamFire Hoses: 255 m (850 feet) of 65 mm (2 1/2") fire hose, 360 m (1200 feet) of 38 mm (1 1/2") fire hose
  
- **Pumper No. 68:** **1991 GMC Top Kick**, 2 person cab, built by Almont Fire Truck, purchased as a used unit from the City of Ottawa
  - Pump Capacity: 4,000 L/minute (840 gallons/minute)
  - Booster Tank: 4,000L (800 gallons)
  - Fire Hoses: 60m (200 feet) of 100 mm (4") high volume fire hose, 180 m (600 feet) of 65 mm (2 1/2") fire hose, 210 m (700 feet) of 38 mm (1 1/2") fire hose

<p>Note: This unit was purchased from the City of Ottawa for \$15,000.00 and was appraised at \$80,000.00 by Fort Gary Fire Trucks. It was certified as a first line pumper as a result of its annual pump test.</p>
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This is a test project on response times to the built up area and is temporarily housed in a rental building at 4 Wellington Street.

- **Tanker No.27: 2001 GMC Top Kick**, two person cab, built by Almonte Fire Trucks
  - Portable Pump: Plumbed to the water tank and has 2 preconnected lines.
  - Water Tank: 6,000 L (1400 gallons) with an 800 mm (10 inch) quick dump
  - Fire Hoses: 15 m (50 feet) of 100 mm (4") high volume fire hose, 45 m (150 feet) of 65 mm (2 1/2" fire hose, 60 m (200 feet) of 38 mm (1 1/2") fire hose.

**Equipment Van No. 16: 1981 GMC Grumman**, carries most of the fire fighters protective clothing, extra air cylinders and SCBA, etc.

- **Creek Truck No. 83: 1976 Chev one ton**
  - This unit was purchased and converted to a creek truck by the Montague Township Volunteer Fire Fighters Association and donated to the Fire Department. It is utilized to support tanker operations.
  - Pump Sludge
  - HP 14
  - Inlet 4 inch
  - Outlet 4 inch (estimated at over 400 gpm)

- **Car No. 107: 2000 Chev Impala** former OPP cruiser purchased from Carleton Auto Parts for \$5,000.

- **Rescue No. 3; 1991 Ford E350**, 2 person cab. This unit is operated by the Montague Fire Department and Owned by the County of Lanark.

A 2002 boat c/w a 15 HP motor is also owned by the County and operated by the fire department. Five (5) Montague fire fighters are currently licensed to operate this boat and are trained to Level III of water rescue. This was a specialized training program for the department. This operation is under review by the County of Lanark and the rescue chiefs.

The department is equipped with fourteen (14) active units of self contained breathing apparatus (SCBA) with ten (10) extra air cylinders. Five (5) additional air cylinders are provided for in the 2006 budget. All the active SCBA's are equipped with a Personal Alert Safety System Alarm (PASS Alarm).

## 6.6.1. Building and Facilities

### ***Fire Stations Ownership:***

The Township of Montague owns and operates one fire station. Station No. 1 (headquarters) located at 6547 Roger Stevens Drive, was built in 1978 with a two-bay garage, association room, kitchen and washroom. The association room, kitchen and washroom are on the second floor. The washroom area also doubles as a storage area for written materials used in training, fire prevention and public education. In 1980 additions and renovations were made to add three more apparatus bays and expand the municipal offices to present day.

The fire department and municipal officials are evaluating a second Fire Station at 4 Wellington Street (the former Harper-Condie School). The evaluation started in June, 2005 and is ongoing.

Municipal staff has investigated the possibility of an Automatic Aid Agreement with the Town of Smiths Falls and feel that it is cost prohibitive at this time.

### 6.6.2. Adequacy:

2.1 **Station No. 1:** This fire station is currently meeting the needs of the fire fighters and the municipality.

The fire chief uses the association room for meeting and training sessions. As previously stated it contains a computer station for the department. Since it is simply an open room, no privacy for the fire chief is available. The storage area in the washroom may need to be expanded as the department grows and fire prevention and public education information expands.

A flip chart is provided in the association room along with the video training library. A TV and VCR are located in one corner of the room.

Some storage space is being utilized in the apparatus bays and over the community policing office.

A desk is provided for the association officers along with tables and chairs for its members.

The base radio is also located in the association room.

A hose drying rack is located on the rear wall of the station behind the County rescue unit and the creek truck.

At the rear of the fire station property are two stacked steel containers that serve as a training complex.

2.2 **Station No 2:** This station is under review. This station, established in 2005, is presently providing protection to the built-up area of the Township in conjunction with Station # 1 to minimize and enhance the response times. To date the department is experiencing a reduction of 5 minutes in the response time in the more densely populated area known as Atironto.

**Recommendation # 31**

Council continue to operate Station No. 2 on a trial basis and monitor its efficiency and effectiveness.

## 7.0 Report Conclusions

When an operational review is conducted whether it is in the fire service, industry or any business, improvements can and will be identified. One might say that this is how a service is improved or fine tuned or just ways to better utilize limited resources.

Volunteer fire fighters are a dedicated and unique group of individuals and are recognized as a billion dollar asset by the Fire Marshal in the Province of Ontario.

Yes, they have their internal conflicts like any other volunteer organization but when it comes time to put on the equipment and respond to an emergency, they are a united family of fire fighters.

This review clearly indicates that the Township of Montague is delivering fire protection services in accordance with its needs and circumstances as required by the *Fire Protection and Prevention Act, 1997*.

## **8.0 Summary of Recommendations**

### **Recommendation # 1**

The Establishing & Regulating By-law needs to be reviewed and replaced with a more current model with the appropriate legislative framework. The *approved* list of core services needs to be reviewed to ensure they meet Councils endorsement.

**Note:** The local Fire Protection Adviser from the Office of the Fire Marshal can assist Council by providing a current sample.

### **Recommendation # 2**

Council appoints a Deputy Fire Chief.

### **Recommendation # 3**

That the Fire Chief establishes an *approved* promotional process to formulate for council the appointment of a Deputy Fire Chief. Filling the position of Deputy Fire Chief would provide the opportunity for succession training.

**Note:** The local Fire Protection Adviser from the Office of the Fire Marshal can assist Council with developing an *approved* process.

### **Recommendation # 4**

An office for the Fire Chief be provided in fire station # 1 and all records be maintained in that office.

### **Recommendation # 5**

All policies and OG's need to be available in hard copy to the fire fighters.

### **Recommendation # 6**

The fire chief and captains should meet regularly to develop, review and revise the policies that are endorsed by council for each area of service provided by the fire department that identifies the level of service expected.

### **Recommendation # 7**

The fire chief and captains should meet regularly to develop, review and revise operating guidelines that provide clear direction to staff on actions necessary to implement policies, establish responsibilities and achieve performance expectations.

### **Recommendation # 8**

All by-laws should be reviewed to ensure they refer to contemporary enabling legislation.

### **Recommendation # 9**

By-laws 1156-79, 1862-90, 1850-90 should be repealed as they authorize agreements with Municipalities that no longer exist due to municipal restructuring.

### **Recommendation # 10**

New agreements should be developed and authorized by municipal by-laws for the fire protection services covered by the above by-laws in recommendation # 8.

### **Recommendation # 11**

By-law 1570-86 should be repealed as communications and dispatch service are now provided by the County of Lanark.

### **Recommendation # 12**

All fire department records be maintained in the fire station.

### **Recommendation # 13**

That a comprehensive record management plan be developed to cover administration, communications, apparatus & equipment, fire prevention & public education, training.

### **Recommendation # 14**

If the second fire station becomes permanent then Council should consider increasing the number of volunteer fire fighters in the department.

### **Recommendation # 15**

Develop and implement an incident management policy. Train staff to carry out the expectations identified in the standard operating guidelines and evaluates incidents to ensure effective incident management.

### **Recommendation # 16**

The fire protection agreement needs to be revised to show the new municipality of Merrickville Wolford.

**Recommendation # 17**

Develop an operating guideline outlining situations where mutual aid is to be activated.

**Recommendation # 18**

Delegate responsibility for the development, updating, maintenance and proper distribution of pre-emergency plans to an individual officer for institutional and assembly occupancies in the municipality.

**Recommendation # 19**

Establish a process to review and revise the pre-emergency plans and create new ones as necessary.

**Recommendation # 20**

Maintain copies of all pre-emergency plans on the fire apparatus.

**Recommendation # 21**

The fire department should develop, for council's approval, a fire prevention policy statement and a fire prevention policy.

**Recommendation # 22**

The public education activity records be improved.

**Recommendation # 23**

Appoint the fire chief as an Inspector under the Building Code Act.

**Recommendation # 24**

Provide copies of all fire safety plans in the fire stations.

**Recommendation # 25**

Develop and implement standard operating guidelines for post incident evaluations at all fire occurrences, and ensure appropriate training be provided to other fire department officers such as the Fire Cause Determination course.

**Recommendation # 26**

A draft annual training program be published and posted in the fire stations annually.

**Recommendation # 27**

An operational guideline be developed and implemented, once approved, to identify a recruit training program and document the training received.

**Recommendation # 28**

The department participates in the Municipal Fire Department Instructors Association and the training officer be encouraged to attend the associations meetings and training seminars.

**Recommendation # 29**

A health and safety committee be established in the department as required by the Occupational Health and Safety Act.

**Recommendation # 30**

The employee representatives be trained and certified as required.

**Recommendation # 31**

Council continue to operate Station No. 2 on a trial basis and monitor its efficiency and effectiveness.