

FIRE PROTECTION SERVICES STRATEGIC PLANNING



FINAL REPORT
SEPTEMBER 2005



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Corporation of the Municipality of Leamington
FIRE PROTECTION SERVICES
Strategic Planning Report 2005
Executive Summary

I *Introduction:*

In 2003 the Municipality of Leamington committed itself to the development of a comprehensive fire service evaluation and long-range strategic work plan in fire services. Specifically, the overall objective was to provide the community with information regarding the efficiency and effectiveness of fire services and how it is organized to meet the municipality's current and future fire protection service needs.

A community task force was approved by municipal council to conduct the evaluation and strategic work plan. The study team consisted of the following members:

- Deputy Mayor Rob Schmidt (Chair)
- Councillor Herb Enns
- Councillor Frank Gabriele
- Bob Stephens, Community Representative
- Allan Botham, Community Representative
- Mike Bradt, Leamington Fire Association
- Mike Ciacelli, Leamington Fire Association

The resources team consisted of the following members:

- Ontario Fire Protection Advisor, Herb Clements
- Fire Chief Bob Bradt
- Deputy Fire Chief Ron Russelo
- Deputy Fire Chief Chuck Parsons
- Director of Community Services Rick Atkin

To achieve the study objectives ten committee meetings were held; one community public meeting and one meeting with members of the Leamington Fire Department.

II *Report Format*

The study reflects the following background reports:

a) *Phase I Fire Protection Services Review:*

This phase is a *snapshot* of our community; a community profile (growth, building activity, fire budget, economy, etc.), a risk assessment, status report of local infrastructure, a review of operations, a review of fire department maintenance issues,

department organization, etc. A copy of this report is available in the Community Services Library (March 2005).

b) *Phase II Strategies for the Delivery of Fire Protection Services:*

As a result of work undertaken through the community review process, this phase makes recommendations for the present and future service provisions of the Fire Department. Approximately thirty recommendations have been identified by the committee (April 2005). A copy of this report is available in the Community Services Library.

c) *Phase III Fire Protection Services Implementation Schedule:*

This phase takes the recommendations identified in Phase II and prioritizes/schedules them over a four year period based on the urgency of the recommendation, financial impact, complexity of the recommendation and logistical priority (May 2005). A copy of this report is available in the Community Services Library.

d) *Phase IV Monitoring and Evaluation (To be completed by Fire Chief):*

The overall strategic plan presents to council a variety of recommendations scheduled over a four-year term. These recommendations are aimed at providing an optimum level of fire protection for the community; ... in keeping with local needs and circumstances Phase IV is intended to provide council with a yearly status report from administration on the yearly recommendations identified in the Fire Department work plan and work accomplished; thus a process to monitor and evaluate the study.

III *Implementation Format:*

The implementation of the various recommendations are scheduled over a four-year period. The intent is to make the strategic plan a *living document*, in that, as the current year of the plan expires; a year will be added to the end of the plan in order to reflect the developing needs of the community. Following is the final draft report dated September 2005 of the recommendations prepared by the community task force coupled with an implementation schedule.

IV *Recommendation Highlights:*

Although all the recommendations of the study are important, three or four recommendations were identified by the community as urgent to building a stronger and more immediate efficient fire department. They are as follows:

a) *Level of Service Policy:*

The task force suggests that the Fire Department administrative staff need to prepare and

present to council for their approval a comprehensive level of service policy which will allow council the opportunity to determine which fire services the municipality should continue to offer and which ones should be diminished or “channeled” to other service sectors.

By way of example, the municipality currently provides “offshore water rescue,” carbon monoxide testing, fire extinguisher training...all of which are important components of fire/emergency prevention, however all are not presently authorized by our municipal council for inclusion in municipal regulating by-law for fire services.

The undertaking of this component of the strategic plan is significant to the future of fire/emergency services in Leamington. The level of service policy will determine future staff resources, training expectations and equipment needs.

b) *Fire Prevention Inspections:*

The task force suggests that council will need to examine the level of service in the area of Fire Prevention inspections, coupled with plan reviews, pre-planning and preliminary fire investigations.

It was noted that with the Leamington building stock identified in the Phase I component of the study and the perceived future growth that inspections are currently conducted upon “request or complaint” (minimum mandatory requirements of the Fire Protection and Prevention Act) and that a greater frequency standard to inspections should be considered. The task force strongly recommends that additional staff be allocated (preferably to fire services – Fire Prevention Officer) to ensure that the frequency to inspections are increased thus increasing the municipal due diligence level to existing building stock.

Council should note that although the task force is recommending the need for additional staff in area of “inspections” that there is no regulatory responsibility to proceed beyond the minimum mandatory requirements of the Fire Protection and Prevention Act; -- request or complaint.” Council should also note that the task force has listed staffing alternatives to meeting the concerns of “inspections” in the community.

c) *Fire Facility Location Study:*

The task force acknowledged that the location of a fire hall is critical to an effective fire department emergency response. With the existing fire hall situated within the core of the urban business area, travel time to and from the existing facility has added to the response time of our firefighters. Additionally, growth to the east has suggested the need for an additional or expanded fire hall to accommodate growth. As well, the existing fire hall does not lend itself to the practical training needs of our fire department.

The task force has suggested to council that a more detailed Fire Facility Location Study needs to be conducted for the municipality; – a study which should examine speed and travel time factors, response standards, fire risk mapping, etc.

The task force strongly suggests that the municipality seek the assistance of the office of the Ontario Fire Marshall to undertake this task.

d) *Assessment of Staff Levels:*

The task force acknowledged that the current dedication to fire prevention in our municipality to be excellent. The committee had much discussion on the need to increase squad sizes not only to attend and maintain the average number of personnel in an emergency scene effectively and safety, but to the effect that current staff levels may impact the overall operation of fire services and its impact in the community – i.e. inspection requirements, enhanced emergency planning, firefighter workplace approval, etc.

The task force suggests to council that upon completion of the level of service policy, completion of the fire facility location study coupled with response times, review of existing work loads, that the use of the Ontario Fire Marshall's Office to assist the municipality with assessing current levels of fire personnel would be appropriate.

V *Conclusion:*

In an enduring effort to ensure that the citizens of Leamington receive optimum fire safety and in anticipation of the challenges that will be presented to the fire service industry, the community task force was presented with the enormous challenge of developing the department's first strategic work plan in fire services.

From the outset the document was envisioned as one which, drawing upon the expertise and active participation of fire employees, provincial fire protection advisors, members of council and community would identify the necessary goals, objectives and work plans that would allow the municipality to meet the aforementioned challenges.

After months of diligent work the committee is pleased to present to council a living document, -- a blueprint for positive and continuous improvement within the Leamington Fire Department.

The plan contains recommendations and future tasks that are adaptable and changeable to the needs of Leamington.

It is the wish of the task force that council will adopt the findings of the report and encourage its administration to timely work towards implementing the tasks identified.

In closing, all members of this community task force are to be commended for the time and effort to make this study a reality.

VI *Recommendation:*

That council acknowledges the work undertaken by the Community Task Force – Strategic Fire Protection Plan;

And further, that the said Strategic Fire Protection Work Plan be adopted in principle and be referred to municipal administration for review and development of the appropriate reports with respect to the recommendations outlined in the said plan.

YEAR 1 WORK PLAN

RECOMMENDATION #1:

That Administration provide an overall detailed council report on the current levels of service being provided by the Leamington Fire Services with the goal of developing a written “Level of Service” policy for adoption by Council that addresses all areas of emergency services to be provided by the department and to what level of service.

The recommendation will require a significant amount of work by administration and consideration by council; the success of this strategic plan is contingent upon the “level of service” to be approved by council. Without it plans cannot be made and the strategic plan may not achieve its goal of:

“Developing a strategic Fire Protection Plan which provides the optimum level of protection to the community”

The “level of service” policy will require administration to comment on all areas of emergency services provided by the department and all fire prevention services established and proposed. Following the Year 1 Work Plan is Exhibit 1 – “Sample proposed Level of Service” policy, which is intended to give administration an example of a level of service policy. The sample is just that, an example of a policy, - administration will need to tailor its policy to Leamington’s needs.

Background Notes to the Recommendation

The Fire Protection and Prevention Act, 1997 provides that 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;
- b) Provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances.
 - i) *Emergency Response:*

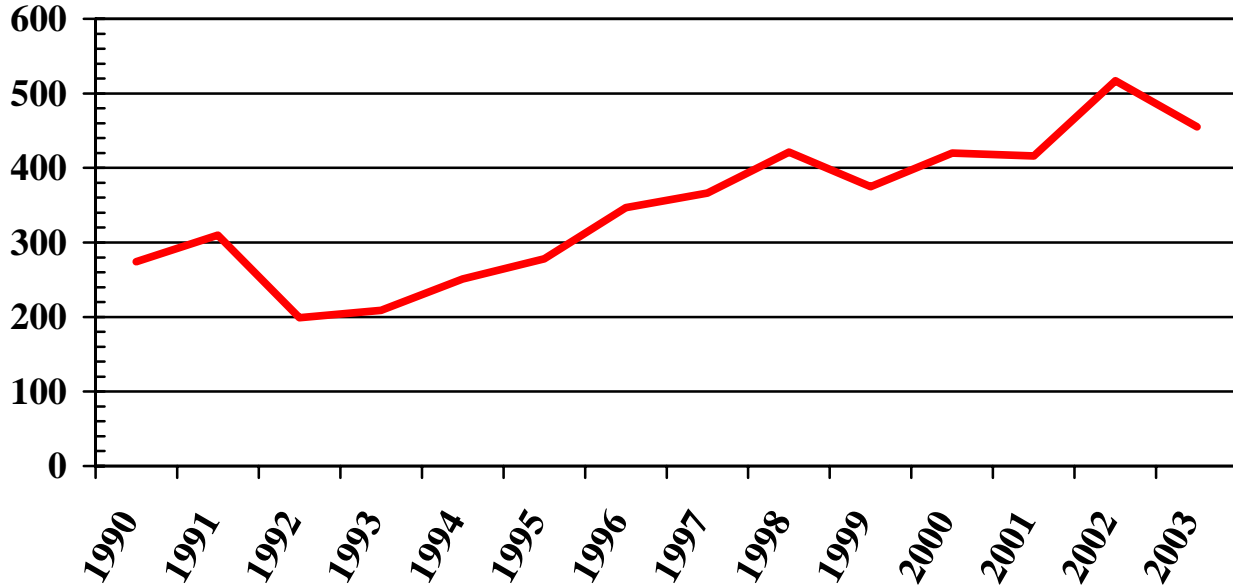
Leamington Fire Services provides twenty four (24) hour basic fire suppression and emergency rescue services as generally outlined in the existing municipal establishing and regulating Fire Services By-law 295-01. Exterior/interior structural firefighting, vehicle firefighting, grass/brush firefighting, transportation incidents – i.e. watercraft, vehicles, vehicle extrication, entry level water and ice rescue, municipal emergency plan participation, public assistance, other agency assistance, operational level confined space rescue, awareness level hazardous materials response and any other natural or accidental emergency having potential

for environmental damage or threat to public safety, are examples of existing fire suppression and emergency rescue services provided in Leamington.

Figures 1 and Figures 2 provide an indication as to how Leamington's emergency response has increased over the past decade.

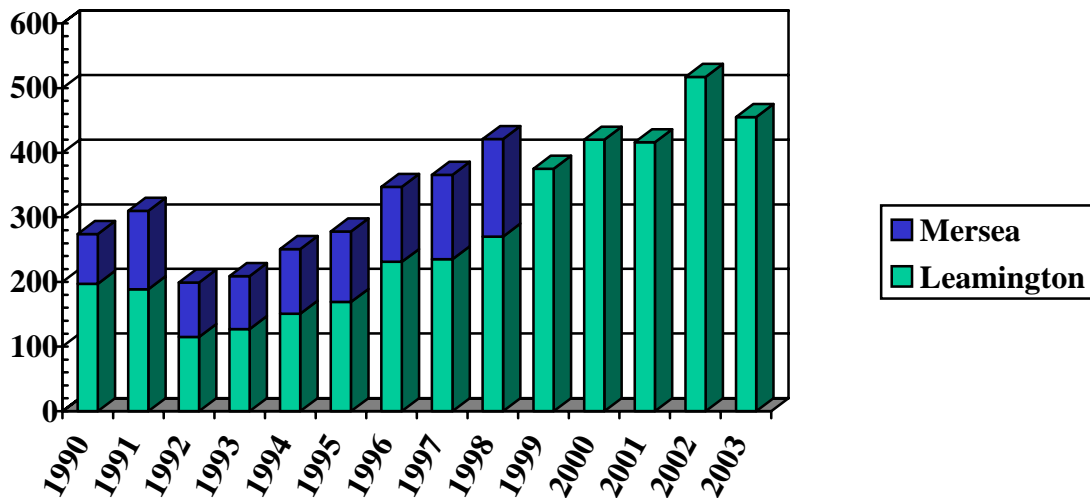
Total Emergency Responses

Figure 1



Total Emergency Responses

Figure 2



In Leamington, the majority of response type calls reflect false alarms, loss of property, and pre-fire conditions such as unauthorized burning.

The detailed statistics for both Leamington and the province (average years 1998-2003) are shown in appendix as Appendix A and B at the end of the report. However, for summary comparison purposes the percentage response calls reflect the following:

Percentage of Yearly Total			
<i>Response Type</i>	<i>Year</i>	<i>Leamington</i>	<i>Ontario</i>
<i>Loss Fire (Property)</i>	1998	18%	5%
	1999	18%	5%
	2000	21%	4%
	2001	17%	5%
	2002	13%	4%
	2003	10%	4%
	<i>No Loss Fire (Property)</i>	1998	14%
1999		18%	3%
2000		5%	3%
2001		11%	4%
2002		13%	3%
2003		11%	3%
<i>Other Calls (False Alarms)</i>		1998	26%
	1999	26%	25%
	2000	30%	24%
	2001	30%	22%
	2002	36%	22%
	2003	29%	23%
	<i>Medical</i>	1998	---
1999		---	40%
2000		---	41%
2001		---	41%
2002		---	42%
2003		---	39%

The provincial average suggests a higher response time to medical related issues followed by other calls such as false alarms. Leamington Fire Services does not respond to medical response items, as such, the overall comparison between the provincial average and the municipality may be skewed.

As noted, the municipality is at an “awareness” level of hazardous materials response, which simply means that responding fire crews are restricted to identifying the source

and nature of the problems, the hazardous materials involved, securing the area and notifying the appropriate agencies. Hazardous material response is handled through an agreement with the County of Essex and the City of Windsor.

With the introduction of the municipal transient marina, shipwreck diving and the possibility of a dive park, fire personnel have realized a significant response change from “near shore water rescue” to “off shore water rescue” i.e. response calls vary, however, an average year would reflect five calls.

Leamington’s water rescue fire crews are classified as “entry level” trained and are restricted to primarily shore rescue and limited offshore rescue (one mile).

The existing water rescue equipment is not adequate to meet demands of offshore rescue (beyond the shore) nor are fire staff trained beyond the entry level.

It is understood that the former Leamington – Mersea Fire Board had reviewed a report by the previous Fire administration, a report which contained cost estimates and education requirements with respect to water rescue and extending its jurisdiction beyond the shoreline. At that time the Fire Board did not support an extension of water rescue programs because of the cost of training and equipment required. Water activity in Leamington has changed and both fire personnel and the community suggest that water rescue in Leamington is significant enough to warrant a level of service review; - current activity and miles of shoreline.

The task force recognizes that other agencies do provide water rescue, however their roles and responsibilities are limited:

- a) OPP are responsible for recovery and not rescue;
- b) Coast Guard is situated in Amherstburg which from a “time” perspective is not adequate to meet an emergency in the western basin of Lake Erie.

Ice emergency rescue, although not as prevalent as water rescue is restricted to identifying the source and nature of the problem and waiting for direction from the Canadian Coast Guard on how to proceed with this type of emergency rescue. Like water rescue the fire department does not have the ice rescue equipment nor staff trained beyond the entry level.

Leamington, as per council directive does not provide advanced medical assistance with defibrillation. Specifically, the municipality does not have the resources nor trained personnel to undertake this component of emergency rescue.

In conclusion, the public expectations of municipal fire services in the area of suppression and rescue are very high; expectation is for fire services to have a

solution for all emergency incidents. Public reliance on fire emergency service in Leamington is significant; ... and it is the opinion that the existing regulating Fire By-law does not clearly reflect all of the emergency services being provided by fire services – i.e. offshore water rescue and as such necessitates further review.

ii) *Fire Prevention Programs*

In addition to fire suppression and emergency rescue, fire services is responsible for a Fire Prevention Program consisting of fire safety education, fire safety inspections, code enforcement, planning and fire cause determination and investigation.

The municipality, through its Fire Regulating Services By-law, provides some degree of understanding as to what the overall responsibilities of the Fire Department are in fire prevention. However, the by-law is limited to the specific levels of service, which are to be provided – i.e. what is to be the standard of level of inspections? Frequency to inspections? etc.

a) *Public Fire Safety Education:*

Leamington Fire Services offers a good variety of fire safety education programs to both the general public as well as special interest and target groups – Older and Wiser program, smoke alarm, TAPP-C, school programs etc. By way of example in 2004 Leamington Fire Services logged 327 man-hours to public education, servicing over 3400 persons (i.e. safety monitors on school buses, fire extinguisher training, special events, etc.). As well, with the substantial growth in the greenhouse/agricultural industry and the influx of migrant workers the fire evacuation plans and occupancy regulations related to their work place are seldom reviewed. Unfortunately, with the migrant workers limited knowledge of English, the Fire Department finds itself needing to work outside “the box” to develop programs in the native language of the worker. Couple these initiatives with a provincial need for education programs to encourage the installation of residential sprinkler systems and carbon monoxide testing, fire personnel find themselves extending their fire safety education mandate beyond what is generally outlined in the existing Fire regulating by-law.

b) *Fire Safety Inspections:*

Currently, fire inspections in Leamington are conducted pursuant to the Fire Code – “upon request or complaint.” With the building stock which has been introduced to the community over the past decade Fire Services has found itself struggling to meet the minimum public safety guidelines of the fire code. The majority of inspections are performed by the Fire Chief; -

making it extremely challenging for the chief to perform these tasks coupled with his other administrative duties.

In 2004, fire services logged 288 hours in fire prevention inspection activities completing 182 inspections of a municipal building stock of 11,387 units. Many of the inspections are performed by the Fire Chief “after hours.”

The existing fire regulating by-law is very generic to the types of occupancy, frequency of inspections etc. The task force has suggested that inspection expectations need to be standardized by council through the regulating by-law. This issue of fire safety inspections is dealt with in greater detail in this report; however, the intent at this time is to suggest that a level of service policy is required to the existing regulating fire by-law.

c) *Preplanning, Plan Review, Fire Cause Determination/Investigation, Emergency Preparedness:*

In Leamington the increased demands in other firefighting areas has minimized the task of pre-planning. With the exception of new building development very little facility documentation is inventoried, maintained and archived in the fire administration area.

The fire chief is a member of the municipal development services committee, as such he is the primary contact with the building department to ensure compliance with applicable codes and regulation; however, and as previously noted many of his other administrative duties has challenged his task of plan review.

Although, the Ontario Fire Marshall is responsible for investigating the cause, origin and circumstances of a fire, the municipal regulating by-law reflects a need for Leamington’s captains and firefighters to be trained to a certain degree in fire cause determination and scene preservation. The existing regulating fire by-law is not specific as to the expectations and training requirements of its staff in this area or in other fire prevention areas.

Lastly, the province of Ontario has undertaken a process to reform emergency management in Ontario. Legislation has been approved which has added additional emergency management duties to municipalities and in particular fire services. The process now includes:

- i) Mandatory community hazard identification
- ii) Mandatory emergency plans

- iii) Mandatory emergency management programs including training, exercise, public awareness and recovery

Fire staff have assumed the lead role in emergency preparedness, however, this added responsibility has not been amended in the regulatory by-law.

Summary

As previously noted, the level of service component will require a significant amount of work by administration and consideration by council. There are no immediate financial impacts anticipated; only impact would be the time required by staff to develop and prepare a written policy statement for presentation to council. In the “long term” the financial impact could be significant – additional staff, enhanced training and capital investment to achieve the “level of service” approved by council.

EXHIBIT 1

THE CORPORATION OF THE MUNICIPALITY OF LEAMINGTON LEAMINGTON FIRE DEPARTMENT LEVEL OF SERVICE POLICY

Whereas the Fire Protection and Prevention Act, 1997, provides that 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.

And whereas, the Fire Protection Master Plan as presented to council in September of 2005 recommended that the Leamington Fire Department develop a written “level of service” policy for adoption by council that addresses all areas of emergency services provided by the department and that a written fire prevention policy also be developed for adoption by Council.

Therefore, the Municipal Council of Leamington enacts the following level of service policy.

The Leamington Fire Department will provide as required, and as resources permit, the following level of service:

Emergency Response

- Exterior structural firefighting;
- Interior structural firefighting (including the rescue of trapped persons);
- Vehicle firefighting;
- Grass/brush firefighting
- Land-based marine firefighting;
- Awareness level hazardous materials response;
- Transportation incidents, including vehicles, trains, aircraft and watercraft;
- Vehicle extrication;
- Water and ice rescue – water entry level;
- Public assistance;
- Other agency assistance;
- Municipal emergency plan participation;
- Any other natural or accidental emergency having potential for environmental damage or threat to public safety;

Fire Prevention

Pre-Incident Planning

The Leamington Fire Department will conduct pre-incident planning using National Fire Protection Association 1620 – Recommended Practice for Pre-Incident Planning.

Fire Cause Determination/Investigation

The Leamington Fire Department will provide fire cause determination and /or fire investigation services in cooperation with provincial, private and other municipal agencies, as required.

Inspection Services

The Leamington Fire Department will provide fire safety inspection services as indicated in the following table.

<i>OCCUPANCY TYPE</i>	<i>FREQUENCY</i>
Assembly	TBA
Institutional	TBA
Commercial	TBA
Industrial	TBA
Multi-Unit Residential	TBA
Boarding/Lodging	TBA
Hotel/Motel	TBA
Single Family Residential	TBA

Public Fire Safety Education

The Leamington Fire Department will provide public fire safety education programs as follows:

School Program	Annually
The Arson Prevention Program for Children (TAPP-C)	On request
Smoke alarm programs	Ongoing
Station tours	On request
Fire Prevention Week program	Annually
Fire safety talks for special interest groups	On request

This “Level of Service Policy” has been reviewed and approved by the Municipal Council of the Corporation, Municipality of Leamington on this ____day of _____,2006 and is applicable in its entirety, for the whole of the municipality of Leamington. This policy statement is subject to annual review.

RECOMMENDATION #2:

That the administration review with Leamington Police Dispatch the current method of logging/recording fire dispatch messages to ensure that proper documentation is summarized to meet the needs of the fire department and public safety guidelines of the Ontario Fire Marshall.

Background Notes to the Recommendation

The Municipality of Leamington owns an effective and modern communications system, which is operated on the Town's behalf by the Leamington Police Service. The centre is equipped with paging capabilities, which operate on the radio system. This allows the communicators to instantly notify firefighters both on and off duty of any emergency requiring fire department response.

The province has established public safety guidelines for an expected response to a single family dwelling fire – *“10 firefighters in 10 minutes, 90% of the time.”* In 2004, Leamington attended to approximately 39 single dwelling fires, however, the documentation as whether Leamington achieved the provincial safety guidelines has never been maintained or evaluated.

Multi-unit apartment complexes, commercial and industrial emergencies are evaluated for assembly on their own uniqueness, however, and as with single-family dwellings documentation to date has been limited.

This recommendation requires a comprehensive review of how the Fire Department documents its initial response time until the time it reaches the scene of an emergency incident; at present there is no mechanism to track the information.

To fully evaluate the effectiveness and performance in responding to emergency calls, the full sequence of events must be considered, from the time an emergency occurs until the service is delivered.

Fire administration will be required to investigate if there are fire opt computer models available to track emergency response times and secondly, review the implementation of this guideline with Leamington Police Services dispatch.

The goal of this exercise is to demonstrate to the office of the Ontario Fire Marshall that the municipality is meeting the public safety guidelines of the F.F.P.A.—single-family dwellings—10 firefighters in 10 minutes, 90% of the time or *its equivalent for rural areas*. As well, this exercise will provide some of the key background data to a fire location and fire personal study, which is anticipated through other recommendations of this report.

This recommendation may have a financial impact on fire services; --currently fire services contract its dispatch services from Police Services, as such, Fire Administration will need to

review the capabilities of the current dispatch program to accommodate the tracking of emergency response time. Should the existing system not have the capacity to accommodate this request, fire services may be required to purchase additional related software to perform the tracking task. It is guesstimated that the applicable software programs would be in the area of \$10,000.

RECOMMENDATION #3:

That the municipal Regulating By-Law; 295-01—To Establish A Fire Department, be revised to reflect the core values and levels of service of the department and municipality.

Background Notes to the Recommendation

Regulating By-Law—To Establish a Fire Department

The existing fire by-law contains the primary goals of the department coupled with duties of the Fire Chief and general responsibilities to equipment, firefighting, fire prevention, public education, training, etc (see Appendix C).

The by-law is consistent and relevant with Ontario’s Fire Protection and Prevention Act. However, and as outlined throughout this report, the “levels of service” are not clearly defined in the regulating by-law. Nor does the by-law clearly define the quality “of the services that are to be provided.”

This recommendation suggests that once the levels of service and core values of the department have been approved by council that the regulating fire bylaw “*to establish a Fire Department*” be revised.

There is no financial impact on the Corporation to implement this recommendation; --only impact would be the time required for administrative staff to develop and prepare a written policy statement for presentation to council.

Note: This recommendation might be better placed in Year three or four of the Fire Department work plan;-- once the level of services and other related recommendations have been approved by Council.

However, Fire Administration are concerned that the municipality is operating without a current regulating by-law, as such, the request to see the existing by-law amended in Year I. This request can be accommodated; however, fire administration should note that the regulating by-law will need to be updated yearly until the recommendations in the strategic plan are acted upon.

RECOMMENDATION # 4:

That administration prepare for council consideration a background report on the existing open air burning policy—i.e. number of calls, resources required to contain a fire, etc.;

And further, that the report suggest to council additional farm management policy strategies to enhance the existing open air burning by-law; i.e. violation tickets;

And further, that the Leamington Fire Department continue to educate the community on the “open air burning policies” of the municipality.

Background Notes to the Recommendation

Open Air Burning

The municipality has an open air burning policy reflective of both the urban and rural areas. In the urban area “*open air*” burning of any kind is prohibited with the exception of small confined fires, supervised at all times and used to cook on a grill or a barbeque.

In the rural area, residential uses stipulate the “*open air*” burning of any kind is prohibited with the exception of small confined fires, supervised at all times and used to cook on a grill or barbeque.

Within the rural area there is an exception to the “*rural open air policy*” and that is in the area of “*Farm Occupation*”. Open air burning of materials made of/or containing rubber, plastic, petroleum, tar, building materials or anything else that will cause an adverse environmental effect on the community and its residents is *prohibited*, however, — all other material such as orchard cuttings, dried vegetable matter or vegetation is permitted. It should be noted that burning is permitted within the guidelines of safety and control; — i.e. 25 meter setback from the building, adult supervision, etc.

The open air burning by-law does allow for a three hundred dollar penalty after a first violation. The by-law was established in 2000 and the Fire Chief notes that the number of response calls has been reduced, however, it is suggested that the farming community still requires greater education to the existing policy and the impact farming operations have on the community. The general public still remain confused on the issue of “*smoke and smell*”—situations usually outside of the realm of the Fire Department.

Issues such as “*smoke and smell*” are usually issues requiring the Ministry of Environment attention and M.O.E. staff are not usually available to timely respond to issues. The public are usually looking to an immediate solution to their problem and call the Fire Department for assistance.

Generally, urban residential dwellers appear to have much difficulty understanding the policy,

particularly, open air burning by the farming sector; --they see the farming community as abusers of the policy with limited restrictions. The task force suggested that any follow-up report by the Fire Department should contain clauses/comments on the ability of the Fire Chief on his designate to issue violation tickets to those, which abuse the “*Open Air*” Burning policy.

This recommendation suggests the department review its existing Open Air Burning policy and present to council a revised policy, which addresses the outstanding operational and enforcement issues of the existing policy – i.e. farm operations, specifically open air burning of materials such as plastic and ways/means to enforce the policy.

There is no financial impact on the Corporation to implement the recommendation. The only impact would be the time required for administration staff to develop and prepare a written policy statement for presentation to council and ultimately for the time required to maintain/monitor the revised policy.

YEAR 2 WORK PLAN

RECOMMENDATION #5(a):

That the municipality continue to provide firefighters, the firefighting training necessitated to perform their duties as firefighters and secondly, that the position requirements of a firefighter be reviewed and revised on an annual basis to reflect the legislative and liability requirements of the province and the municipality and thirdly, that whenever the opportunity presents itself that countywide training opportunities be encouraged.

RECOMMENDATION #5(b):

That additional computer workstations be added to the fire department inventory to assist the fire captains and firefighters accessing pertinent fire files and communication memos and secondly, that the appropriate computer training be provided to all members of the Fire Department to ensure efficiency, speed and accuracy in utilizing the said computers by municipal I.T. staff.

RECOMMENDATION #5(c):

That additional fire administrative and Human Resource management training opportunities be provided to the Chiefs and Deputy Chiefs in their supervisory and management roles.

RECOMMENDATION #5(d):

That the introduction of “on-board” fire vehicle computers, which provide by way of example the most direct and fastest route to a fire/emergency scene, the provision of pre-planning facility information, and the provision of hazardous materials information be considered for councils consideration.

RECOMMENDATION #5(e):

That Fire Department personnel continue to be provided additional training in fire cause determination and scene preservation.

Background Notes to the Recommendation

a) Firefighter and Officer Training:

The Leamington Fire Department provides a wide variety of emergency and non-emergency services to the community. The fire department is expected to provide these services effectively, efficiently, and safely. In order to accomplish this, training must be comprehensive and on going.

Given the variety of emergency and non-emergency services the department provides the community, training demands considerable time and attention. Our firefighters train to provincial standards in firefighting techniques.

Firefighters are each required to complete 68 hours of in-house training annually. Firefighters also attend a number of seminars and courses outside the department each year. Many of these training opportunities involve assignments, which must be completed either before and/or after the course. Learning resources must be made available if these firefighters are expected to successfully complete these programs and fill their rolls on the department. As firefighter training is becoming much more of a costly legislative/liability requirement it is suggested that better ways/means to accommodate training be pursued—i.e. countywide training.

The department is mandated to keep training records on each firefighter, which document the training history and competency level of that individual. The training program must be under constant review and revision in an effort to maintain an acceptable level of training to meet legislative and liability requirements of the province and municipality. These demands are ever increasing and place added pressures on department resources. A good example of this is in the area of fire cause determination/investigation.

The coordination of department training activities, program development and review, personnel performance assessments and profiles, is becoming increasingly complex and time consuming, however, the risk of not providing firefighter training takes away from the goal of providing the optimum level of fire protection in the community.

b) *Fire Department Administration/Technology:*

Fire department administrative staff includes the Fire Chief and two Deputy Fire Chiefs with administrative support from a secretary/receptionist who currently works 35 hours per week. Increasing demands of the fire service to provide more complex services coupled with a constantly rising standard of competency of fire service personnel place ever increasing pressures on administrative personnel. These demands come not only from the local community, but also from federal and provincial levels that expect local government to implement their programs. Evidence of this can be illustrated through the Occupational Health and Safety Act, the Fire Protection and Prevention Act, Emergency Planning, etc.

The administration staff have four computer work stations to assist with their administrative duties.

To date much of the computer documentation has been focused on word processing and electronic mail system coupled with interfacing between departments. The department recently purchased a Fire Pro 2 software package which has the capability of preparing

standard fire incident reports, fire prevention reports, apparatus maintenances reports, and some personnel file data—i.e. training etc.

Computerization has been accepted by the Fire Department; however, competency levels of the existing staff remain varied and will remain as such, until additional training and familiarization of the system is realized.

Relative to the existing fire administration team it was noted that the majority of the team are well versed in the technical realities of operating a fire department, however, all three are relatively new to the Human Resources and management skills necessitated to administer a department. These new skills coupled with the introduction of a unionized environment suggest that much training and support will be required to ensure efficiency in the department. As the roles/duties change—i.e. Fire Chief assuming much more of an administrative role in Fire Services, the municipality will need through performance development to establish targeted management workshops to enhance their administrative skills.

The provision and use of computers by the fire captains and firefighters has not been developed, however, an additional workstation should be added to the fire station. The establishment of a fire station network would establish an electronic information path to all firefighters/squads and management. This approach would allow fire officers to enter training reports, alarm reports, work schedules, to receive a station vehicle inventory and also receive memos and communication from management.

As well, the introduction of “on-board” computers, which would provide the most direct and fastest route a fire emergency scene, the provision of facility pre-planning information, and the provision of hazardous materials information to fire trucks should be factored into the plan.

In conclusion, the recommendations identify a need to increase the training and education requirements of the firefighters and fire administration in the following areas:

- a. Firefighters
 - i. Computerization;
 - ii. Provincial standards in firefighting techniques;
 - iii. Firefighter certification.

- b. Fire Captains/Fire Administration
 - i. Computerization;
 - ii. Provincial standards in firefighting;
 - iii. Officer training and certification;
 - iv. Human resource development – performance reviews, management skill enhancement.

The Ontario Fire College will provide some of the training and education opportunities necessitated to perform officer and administration tasks. Like the firefighters, the provincial subsidy to assist with these tasks will be diminished to the point where either the firefighters or municipality will need to cover the training initiatives.

The financial impact to achieve enhanced training and education for the firefighters, captains, and senior fire administration will require additional funding to effectively, efficiently and safely meet the provincial standards in firefighting and as per the terms of the firefighters collective agreement. It is suggested that the existing fire services training budget will require additional dollars in the amount of \$2,000 to \$5,000 annually. At the same time, the fire department will need to seek out other community opportunities to maintain reasonable education and training costs – i.e. County Wide Training Programs that could provide greater opportunity while at the same time reduce costs.

RECOMMENDATION #6:

That administration actively encourage, through its Fire and Building Department community education programs, information pertaining to the value of retrofitting and or installing residential sprinkler systems wherever practical.

Background Notes to the Recommendation

Built-In Suppression Capabilities

As with fire alarm systems, the *Ontario Building Code* requires built-in suppression devices in certain buildings or applications. The Ontario Building Code does not address residential fire suppression systems, however, as a proactive initiative, it is suggested that the municipality actively encourage the installation of residential sprinkler systems wherever practical. Residential sprinkler systems are designed to provide early fire suppression capabilities with minimal water damage; such an approach would go a long way to reducing residential losses, particularly, those structures situated in the far extremities of the municipality.

Although the installation of residential fire alarm systems is not mandatory the maintenance of these systems if and when approved would be a component of the Fire Inspection Program. The frequency of inspections would need to be reviewed.

This recommendation suggests that the Fire Department in conjunction with the Building Department will need to prepare and present to council for their consideration an education policy which addresses the benefits of home sprinkler systems in new residential development. The report is not be intended to “mandate” residential sprinkler systems but to demonstrate to council and the community the benefit of residential sprinklers – i.e. reduced time between when a fire is detected and extinguished. The National Fire Protection Association (NFPA) indicates that between 1983-1992, homes with sprinklers experienced 57 percent fewer deaths

than non-sprinkler homes. At some time in the planning cycle and after discussions with the builders association the municipality may wish to detail a more comprehensive policy. Initially there should be limited financial impact on the corporation to implement this recommendation – i.e. cost to produce an education brochure.

In the long-term and depending on the feedback from the builders association and community as to the need for residential sprinkler systems the financial impact could be increased to allow for inspections and monitoring by municipal administration.

RECOMMENDATION #7(a):

That administration prepare a written report for council consideration recommending that the level of service in the area of Fire Prevention Inspections, coupled with plan reviews, pre-planning, and preliminary fire investigations be increased to reflect Inspection OPTION 3 as outlined in the Fire Services Strategic Plan; specifically the procurement of one full time person dedicated to fire prevention activities.

And further, that at the end of a two year period that the said position be evaluated by administration/council to ensure that the frequency of inspections, preplanning, plan reviews, etc. are reasonable expectations of the employee and corporation.

And further, that the position of a fire prevention person be filled by a capable, qualified and competent person experienced in Fire Services.

RECOMMENDATION #7(b):

That administration prepare a written report for council consideration outlining the fees and charges of other municipalities in the area of fire inspections coupled with a recommendation as to ways/means of recovering the costs of a fire prevention person to perform the frequency of inspections suggested in Inspection Option # 3 of recommendation 7 (seven).

Background Notes to the Recommendations:

The background component of the strategic plan provides a good understanding of status of inspections in Leamington;--in summary it is suggested that the municipality is not achieving an adequate measurement of inspection; this section provides some options to achieving an adequate level of inspection.

Firstly and for background purposes, the Fire Department has identified its 2004 overall building stock as follows:

<i>OCCUPANCY CLASSIFICATION</i>	<i>NUMBER OF OCCUPANCIES</i>
Assembly	62
Institutional	38
Commercial	615
Industrial	97
Residential	9208
Multi-Unit Apartment Buildings (more than 6 units)	24
Boarding/Lodging	5
Hotels/Motels	8
Non-Classified (Farms, Greenhouses etc.)	1330
TOTAL	11387

A due diligence program suggested by Fire administration would see at minimum 1000 of the total municipal occupancies (11,387) inspected on an annual or semi-annual inspection program. In 2004 the fire department staff logged 288 hours to fire prevention inspection activities, completing 182 inspections.

The breakdown of those inspections/hours is as follows:

<i>OCCUPANCY CLASSIFICATION</i>	<i>NUMBER OF INSPECTIONS</i>	<i>NUMBER OF HOURS</i>
Assembly	1	4
Institutional	4	18
Commercial	42	66.5
Industrial	4	16
Residential	98	98
Multi-Unit Apartment Buildings	13	32.5
Boarding/Lodging	5	15
Hotels/Motels	2	6
Non-Classified	13	32
TOTAL	182	288

It should be noted that inspections in Leamington are conducted, pursuant to the Fire Code, upon request or complaint. Are all inspections necessary?...no, however, a level of due diligence is expected of the municipality; in summary council if they wish can maintain the “*status quo*” and continue to respond by “request or complaint;” the owners are responsible for carrying out the provisions of the fire code, municipal fire services have a public safety interest in ensuring that buildings are “*maintained*” in accordance with the Fire Code.

As noted in the fire prevention section of the background report, the fire department is currently struggling to meet the requirements of public safety guidelines, acts, as well as an acceptable due diligence level of inspections, when measured against provincial protocol.

Leamington’s administrative approach to inspections, to date, has been as follows:

- “Inspections generated by requests or complaints are mandatory by the OFM and are addressed and documented ASAP;
- New business licence inspections as per municipal by-law are performed as soon as possible and are required before a business licence is issued by the municipality;
- Daycare, schools, lodging/nursing homes, assisted living are addressed in a timely manner;
- All others, upon request and quite often after hours due to time restraints.”

Utilizing the building stock identified in this report (page 27) the following chart summarizes the current inspection program (Option 1) coupled with suggested alternate options to inspection frequencies and man-hour requirements. The following also suggests the impact to maintaining the current practise of inspections coupled with alternatives.

OCCUPANCY	ALTERNATIVE INSPECTION OPTIONS							
	OPTION 1 CURRENT PRACTICE		OPTION 2		OPTION 3		OPTION 4	
	Frequency	Hours Req'd	Frequency	Hours Req'd	Frequency	Hours Req'd	Frequency	Hours Req'd
Assembly	As required	4	Annual	248	Annual	248	Annual	248
Institutional	As required	18	Annual	152	Annual	152	Annual	152
Commercial	As required	66.5	3 years	615	2 years	922	1 year	1845
Industrial	As required	16	3 years	230	2 years	340	1 year	679
Residential	As required	98	Request	100	Request	100	Request	100
Multi-Residential	Time permitting	32.5	2 years	84	Annual	168	Annual	168
Boarding/Lodging	Annual for Licensing	15	Annual	20	Annual	20	Annual	20
Hotel/Motel	Time permitting	6	Annual	56	Annual	56	Annual	56
Non-Classified	As required	32	As required	100	As required	100	2 years	330
Migrant Worker Accommodations	As required	0	Annual	200	Annual	200	Annual	200
TOTAL HOURS		288		1805		2306		3798

Note:

In determining the amount of time required for an inspection it should be noted that said reflects not only the actual site visit but allows for site follow-up and written documentation. The following time allocations were utilized to determine the frequency patterns:

1. Assembly, institutional, lodging, migrant worker accommodations...up to 4 hours per site;
2. Commercial, hotel/motel, multi-residential...from 3-7 hours;
3. Residential, non-classified...2 hours.

Comments on Inspection Options

OPTION 1 PROPOSAL:

(That the current inspection target be maintained); the difficulty with this option is that with the existing resources the department cannot meet a due diligence level of minimum inspections of buildings and complexes within the municipality when measured against provincial guidelines.

OPTION 2 PROPOSAL:

(That a program be established that provides a minimum frequency of fire safety inspections in all type of occupancies within Leamington.) This would necessitate the procurement of additional resources to deliver an improved frequency of life safety inspections and improving the delivery of services to a defensible level of the diligence, however, not allowing for future growth/development. The level establishes some terms of frequency over Option 1—i.e. commercial frequency would change from “*as requested*” to once every three years.

OPTION 3 PROPOSAL:

“That a program be established that provides for an acceptable frequency of fire safety inspections in all type of occupancies within Leamington.” This would necessitate sufficient resources to deliver an enhanced frequency of life safety inspections that will address due diligence and provide an acceptable level of fire prevention services to the residents of Leamington. This would also allow the fire department to dedicate a resource person to assist with plan review, preplanning, and inspections...all major components of fire prevention services. This level establishes greater frequency of inspections—ie would change commercial inspections from “*as requested*” to once every two years.

OPTION 4 PROPOSAL:

“That a program be established that provides for an optimum level of inspections based on current risk assessments.” It is suggested this option may be premature and not required until a further needs analysis is undertaken. Community growth will dictate implementation. However, this level establishes greater frequency of inspections—ie would change commercial inspections from “*as requested*” to once every year.

Summary

The recommendation preferred by the task force is Option #3; it should be noted that by adopting the Option 3 that additional resources (man-hours) will be necessitated.

The option #3 suggests an additional 2306 man-hours may be necessitated to perform a reasonable level of due diligence in the area of inspections.

Couple this task with plan reviews and pre-planning one can defend the need for one or possibly

two additional staff persons in the area of fire prevention.

However, at minimum one person should be hired until the workload of the person can be evaluated at the end of a two-year period. The timing of such a report would or could coincide with the retirement of the deputy chief of operations—thus allowing for a possible reworking of his duties to include a component of the tasks described above.

The approach to meeting the necessitated man-hours will require further dialogue between council and its administrative staff as some alternatives to the delivery of this new service may be available.

Specifically, council could look to one of the following scenarios to meeting the Option 3 man hour frequency:

- Hire another full time/casual qualified employee for the Fire Services Department to undertake inspections, building plan reviews, pre-planning, etc.;
- Re-work the job descriptions of the existing Deputy Fire Chiefs to encompass the added responsibilities;
- Contract the services of a person that is knowledgeable and qualified in fire inspections;

Include fire inspections as a component of the building department duties/responsibilities.

Preplanning:

Knowing that responding fire department personnel are familiar with the building or facility does instill confidence in planning for a fire.

Successful fire ground operations can depend on the firefighter or officer having prior knowledge of a building. Its layout, construction, facilities, services, contents and its use can all have significant impact on how a fire or any other situation is approached or handled and, ultimately, the success of fire department operations.

Developing an effective preplan of a building or facility can take considerable time. However, a good preplan can save countless dollars on property conservation, minimize environmental impact, protect jobs and ensure the safety of firefighters and civilians.

In Leamington, the increased demands in other firefighting areas has taken away from the task of preplanning i.e. emergency planning. With the exception of new building development very little documentation is inventoried, maintained and archived in either fire vehicles or the fire administration area.

It is understood that some onsite facility visitation is scheduled for firefighters during training sessions; said is scheduled to familiarize staff with a potential fire scene. This approach of onsite visits has been consistent but has proven to be effective.

The recommended creation of additional resources as presented in Recommendation # 7 will ensure that consistency to preplanning is ensured and effective.

Plan Review:

The Fire Department is represented on the Development Services Committee, which is a committee of municipal staff i.e. engineering, public works, water, etc. Fire Services also works closely with the Building Department to ensure compliance with applicable codes and regulations relative to fire and life safety. The Fire Chief performs this task.

The recommended creation of additional resources as presented in Recommendation # 7 will ensure consistency to plan review – thus ensuring that the applicable codes and regulations are maintained.

Fire Cause Determination/Investigation

The most effective way to fight a fire is to prevent it from happening in the first place. To do that there must be a clear understanding of the cause of fires in the community. Fire cause determination and arson investigation is a learned skill. There is a process currently being developed for the certification of municipal fire cause investigators. A trained eye is required to accurately determine the cause of a fire in the ash and ruin that accompanies fire. Critical evidence can be destroyed if firefighters are not properly trained in fire cause determination.

It is the duty of the Ontario Fire Marshall to investigate the cause, origin and circumstance of fire; however, these investigations are limited to suspected arson fires, fires involving a fatality, explosions and large loss fires.

It is important for the prevention of fire, as well as investigation by the Office of the Fire Marshall, that municipal fire personnel be trained in fire cause determination and scene preservation. In Leamington, captains and all firefighters to a certain degree are trained in fire cause determination and scene preservation.

The recommended creation of additional resources as presented in Recommendation # 7 will ensure consistency to fire investigation.

Summary

In *conclusion*, this recommendation suggests that the Fire Department will need to prepare and present to council a report outlining the need for additional staff to meet the level of activity in the area of Fire Prevention Inspections coupled with plan reviews, preplanning and preliminary

fire investigations. Currently, the majority of this activity is performed by the Fire Chief; the above-mentioned tasks make it challenging for the Chief to perform his other administration tasks.

The task force prepared four options for council consideration – everything from maintaining the current level to annual inspections. Ultimately, the preferred choice was Option # 3 of Recommendation # 7, which suggests a frequency of annually to once every two years. Option # 3 allows for at minimum one additional person to undertake the tasks identified above. The committee noted that with the additional inspection man-hours required to meet Option # 3 coupled with the other fire prevention activities that two staff would better allow for growth. However, until a position review is undertaken in two years that the request should reflect one additional person.

The committee also reviewed who would best be suited to perform the additional fire prevention duties. Four scenarios were presented and ultimately the committee recommended that the position should be filled by a capable and competent person in the delivery of Fire Services. It was not suggested that the other scenarios were not workable, specifically the building department option; however with the additional fire prevention activities being proposed, the position should be filled by fire personnel.

Note: Committee suggests that inspections performed under the Ontario Building Code and the Ontario Fire Code are different enough to maintain separate inspection divisions; suggestion being that the Ontario Building Code addresses a building's life span up to and including the issuance of the occupancy permit on new construction and additions. The Ontario Fire Code addresses the building's life safety issues throughout its lifespan and the Fire Chief as an assistant to the Fire Marshall can exercise its power before, during and after a fire or hazardous event. With various exceptions, the building code is not a maintenance document and does not have the powers to address occupancies' life safety issues nor the building's physical conditions as they change throughout the building's lifetime.

In summary, although the committee is recommending Option # 3, through a further written report to council it is suggested that the said report detail all the inspections options presented in the report for council consideration. Option # 3, the preferred option, allows for an acceptable frequency of fire inspections, however, it exceeds the mandatory minimum requirements of the Fire Protection and Prevention Act, thus, council will need to be aware that there is no regulatory responsibility to accept Option # 3, however due diligence will prevail. The committee responsible for the development of this strategic plan, and in recommending Option # 3 were concerned with due diligence in the area of fire inspections and the additional work of plan reviews, etc.

The financial impact would range from \$52,211 in the first year to \$63,475 in the 5th year (2005 rates). This includes salary only; -- benefits would be additional. As Well, the position would require the use of a vehicle estimated at \$35,000.

As such, this position would increase fire services budget by approximately \$100,000 per year. The municipality does collect development charges, as such, if the new position can be contributed to new growth a portion of the initial position cost could be recovered through development charges.

This recommendation suggests that the Fire Department will need to prepare and present to council a policy report proposing fees and charges for fire prevention staff to perform inspections and possibly the review of development plans. It was noted during committee discussion that the building department currently assess a fee for some of the fire activities thus ensuring that new construction meet Ontario Building Code standards.

However, to ensure facilities are *maintained* to the Ontario Fire Code (after initial construction) a regulatory fee should be considered based on the frequency of inspection. The committee suggests that the proposed background report detail how other communities are instituting a “Best Practices” approach to maintaining inspections reflective of the Ontario Fire Code.

There are no immediate financial impacts anticipated, -- only impact would be the time required by staff to develop and prepare written policy statements for presentation to council. In the long term and depending on the frequency of inspections selected, the study could identify ways/means to offset inspection costs.

YEAR 3 WORK PLAN

RECOMMENDATION #8:

That administration review its policy of fire hydrant locations in the rural area with the intent of developing an implementation plan to ensure that all rural properties have adequate fire protection; and further that the review contain a cost/benefit analysis of the need for additional fire hydrants verses an additional tanker.

Background Notes to the Recommendations:

Water Supply:

As long as there has been fire, water has served at the primary suppression agent. Water supply for firefighting purposes in the Municipality of Leamington is provided through a water distribution system and fire hydrants. For the most part this system is adequate. In the former Mersea Township, fire hydrants are strategically located along township roads/concessions – not all properties are protected by fire hydrants. In all probability the cost of hydrants in the former Mersea (rural areas) may have been prohibitive. The municipality currently utilizes a “tanker” to supplement its strategically based hydrants in the rural area.

This recommendation suggests that the Fire Department will need to prepare and present to council a policy report on the criteria to position fire hydrants in the rural area. The policy report will need to detail the cost of installing additional hydrants in the rural area – thus ensuring that all properties are protected by fire hydrants.

The report should also detail an installation schedule for new hydrants and said should be included in the implementation schedule.

Although the recommendation suggests the addition of new hydrants the report should also provide council with a cost/benefit analysis of the need for additional hydrants verse an additional tanker.

The immediate financial impact is minimal – only impact would be the time required by staff to develop and prepare written policy statements for presentation to council.

The long-term financial impact will be significant but manageable over the duration of the plan; -- the cost of installing a fire hydrant is in the area \$5000 and it is suggested that this work can be done “in house” through the Municipal Water Department.

RECOMMENDATION #9:

That administration continue its present practice of equipping intersections with pre-emption systems, however, that the Fire Department in conjunction with the Engineering Department develop criteria to warrant the equipping of pre-emption systems at future intersections for council approval; and secondly, that the Fire Department develop an education program on the use of “emergency green response devices” by firefighters responding to emergency situations.”

Background Notes to the Recommendations:**Travel:**

Travel time is defined as “*the time required for the fire department to physically travel to the scene of the fire.*”

Factors affecting travel time include the time of day, weather conditions, road conditions or location of the incident. These factors generally are considered to be uncontrollable.

Other factors such as traffic conditions, location of the fire hall, travel routes and distances can have significant impact but can be controlled or manipulated to enhance travel time.

The Leamington Fire Department currently uses a traffic signal pre-emption system called “Opticom”. This is a system, which allows the fire department to control traffic lights at strategic intersections. There are currently 9 intersections equipped with this device; however, there are 4 other intersections that, if equipped, would aid in the reduction of travel time. It should be noted that not only do these devices reduce travel time but they also serve as a risk management tool by increasing the level of safety during emergency response and by reducing the probability of a collision involving fire department apparatus. A responding crew and apparatus has no effect on the fire ground if involved in an accident trying to get to the scene. The committee noted that the criteria to warrant “*Opticom*” systems in the community needs to be developed into a policy statement;--what process is utilized to justify Opticom?

The firefighters have also suggested that during the planned municipal Traffic Flow Study by engineering that the issue of traffic lights and their signal duration be reviewed—i.e. could not the signal duration be changed during “*off hours*” to accommodate a better response time by firefighters to the fire hall?

As well, the Leamington Fire Department permits its firefighters to utilize at their own expense, emergency response devices for their vehicles; said allows for a quicker emergency response by firefighters to the fire hall. Firefighters have suggested that the public are not familiar with the emergency green response devices and that greater fire education with the public is warranted.

In conclusion, this recommendation suggests that the Fire Department will need to prepare and present to council a policy report on the criteria to install pre-emption systems at municipal intersections – what determines the need for pre-emption systems. The Task Force was not suggesting that pre-emption systems were not required in the municipality, -- merely more of justification to location through criteria. Relative to emergency green response devices, the Fire Department should include in its Fire Education Program information on the role of said devices in the community.

There is no immediate financial impact on the Corporation to implement the recommendation – other than the time required for administration to develop and prepare a written policy statement. In the long term the financial impact to install new pre-emption systems would be approximately \$7,000 per unit.

RECOMMENDATION #10:

That administration prepare a report for council consideration requesting the assistance of the office of the Ontario Fire Marshall to undertake a Fire Facility Location Study which would provide council with information and data to develop a deployment and staffing plan that will meet the requirements of the Fire Marshall and municipality for upcoming years; said plan would look to improve the effectiveness and efficiency of the fire suppression staff through changes in the deployment of personnel and equipment and existing facilities; and further that said study results be incorporated into the fire strategic plan.

Background Notes to the Recommendations:

Facilities:

The location of fire halls is critical to effective fire department emergency response. Fire halls need to be strategically located if fire department response is to be within accepted time limits.

In Leamington, the existing fire hall is situated within the core of the urban business area. Travel to and from the existing facility has created some concern to firefighters and to our emergency response times. The growth of the community to east has suggested the need for an additional fire facility.

As well, it has been suggested by the firefighters and administrative staff that the existing fire hall does not lend itself to practical training. As an example, it is hard to practice the deployment of a 16-meter ground ladder against a 7-meter building.

The committee has voiced a number of suggestions—from the need for an additional station, upgrading the existing station, to building a new facility with a practical training centre.

As the opinions are varied and further background material is required to make a decision, it is suggested that a Fire Location Study be conducted for the municipality. The study would cover

fire risk mapping, zoning, developing a road network, speed and travel time factors, response standards/strategies and optimizing the best locations for fire companies and fire conditions. The study would look to existing and future needs inclusive of a practical training centre and the options to providing such a facility -- i.e. jointly through other county fire stations constructing a common training facility, i.e. smoke house.

This recommendation suggests the use of the Ontario Fire Marshall's Office to conduct a fire location study for the municipality. There are reliable software programs available to assist with the said study – programs which are not subject to personal or political influences. Attached is Exhibit 2, which provides preliminary draft terms of reference for the proposed Leamington Fire Station Location Study. Administration will need to request the assistance of the Ontario Fire Marshall; however, the initial indication is that assistance if requested would be available.

The office of the Fire Marshall has utilized the “Fire Suppression Response Simulator Program” to compile the information and data necessitated to assist with the Fire Location Study.

Hopefully, the program, if available, can be customized for Leamington and can provide the following information:

- Existing and potential station locations measured by selected standards of performance;
- Fastest and alternate response routes to specific locations;
- Emergency response times for all fire attack, rescue and support vehicles and personnel;
- Number of fire suppression, rescue and support personnel assembled at specific locations.

There will be a financial impact to the municipality to acquire the appropriate software program and quite possible to request the assistance of the Fire Marshall.

Administration would suggest that \$10,000 be budgeted for software and an amount of \$15,000 for Fire Marshall support.

EXHIBIT 2

Corporation of the Municipality of Leamington FIRE STATION LOCATION STUDY Preliminary TERMS OF REFERENCE

In view of the decision of the Corporation of the Municipality of Leamington that a Fire Station location study be conducted, an evaluation should be made of the Municipality of Leamington Fire Department as it exists today. The study will determine how fire personnel are deployed and organized to meet the municipality's current and future needs.

The study will provide information to improve the effectiveness and efficiency of the fire suppression staff through changes in the deployment of personnel and equipment and the existing facilities.

To assist in the development of the proposed Fire Station Location Study the Municipality of Leamington will seek input by all stakeholders such as municipal officials, both elected and appointed, the Fire Chief and other fire service personnel, as appointed by the municipal council.

While consulting with various stakeholders and steering committee members, it will be emphasized that the approach is to determine the best and most cost effective fire protection services facilities for all residents of the study area; at all times, recognizing the need to maintain adequate and acceptable levels of fire protection services.

The fire station location study will be conducted by the Office of the Fire Marshall at no cost to the Municipality of Leamington.

RECOMMENDATION #11:

That administration prepare a report for council consideration requesting the assistance of the finance department in preparing a business plan to allow for the future development of new facility and/or expansion/upgrading of the existing fire hall.

Background Notes to the Recommendations:**Facility Enhancements:**

In year three of the “study recommendations” the task force has recommended the undertaking of a detailed Facility Location Study through the Ontario Fire Marshall Office.

The Task Force guestimates the cost for an additional station/upgrading of the existing fire station to be approximately \$1.5M.

To facilitate this capital acquisition the committee recognizes a need to examine ways/means of providing for this upgrade and has suggested that the municipal finance department provide a business plan to reflect the recommendations provided through the office of the Ontario Fire Marshall.

YEAR 4 WORK PLAN

RECOMMENDATION #12:

That administration prepare a report for councils consideration requesting the assistance of the Office of the Fire Marshall to assess the current staff levels of the Leamington Fire Department to “levels of emergency service” approved by council, with the intent of providing council with a variety of staffing options—(i.e. part time, composite, full time) to effectively and safely meet the needs of the community.

Background Notes to the Recommendations:

Fire Ground Staffing:

Adequate fire ground staffing is judged on two considerations:

- 1) Assembling initial fire attack teams—Minimum fire ground staffing required to initiate a safe, effective interior fire attack including rescue in a 1 ½ storey single-family dwelling is 12 firefighters, including a supervisor. (The Office of the Fire Marshall position paper on fire ground staffing calls for 10 firefighters and the Section 21 committee, which is comprised of representatives of the fire service, the Ministry of Labour and the Association of Municipalities of Ontario calls for the appointment of a Safety Officer and an Accountability Officer, prior to the commencement of interior fire attack operations.) The assembly of initial fire attack teams has some urgency—flashover can occur within 6-8 minutes after ignition. Flashover is a condition where the entire contents of a room reach a flash point and violently ignite. Chances of survival after flashover are very minimal.
- 2) Sustaining effective fire attack—A successful fire ground operation is often dependant on sustained aggressive fire attack. The ability to rotate fire attack teams frequently and allow for rehabilitation of exhausted crews is crucial if safe, efficient fire ground operations are to be expected.

Leamington Fire Services provides an excellent level of service and response to emergency situations...which is a reflection to the current staff.

The committee had much discussion on the need to increase squad sizes not only to attend and maintain the average number of personnel on an emergency scene effectively and safely, but to the effect that current staff levels impact on the overall operation of fire services and its impact in the community; -- i.e. fire suppression, inspections, emergency planning, firefighter work place approval, etc.

The need to better understand the fire resource makeup of the Fire Department, the municipality, has probably reached a stage where additional study is necessitated. However, prior to further study it is important that the appropriate background data be collected – i.e. attendance, response time, inspection allocation, emergency planning, etc.

This recommendation suggests the use of the Ontario Fire Marshall office to assist the municipality with assessing the current levels of fire personnel.

The timing (Year 4) is appropriate; -- the review of “levels of emergency services” will have been completed; fire location study coupled with response times would have been analyzed with recommendations; the Fire Prevention Officer position (if approved) would have completed two years of on the job experience; -- thus requiring a review of workload; the additional duties of the Deputy Fire Chief in emergency planning would have reached a pinnacle for review. As well, the fire location study should have provided some comment on the preliminary number of personnel, which would be necessitated to man specific locations.

The opportunity presents itself with an opportunity to evaluate the present staffing levels of firefighters; providing some indication as to how we should be proceeding – part time, composite, full time to effectively and safely manage the needs of the community now and into the future.

There will be a financial impact to the municipality to undertake this recommendation. The study suggests the assistance of the Fire Marshall in performing this task; however, it is suggested that an outside consulting firm may be required to provide council with a business plan report to meet the intended staff levels and method of operation. Whomever, the municipality selects for this task it is suggested that \$25,000 be set aside to acquire software, consulting services and a finalized staffing report.

**Ongoing Fire Department
Maintenance Recommendations
Year 1 to 4**

Recommendation # 13:

That administration Department adopt a policy to review on an annual basis the impact of fire on the community and the risks associated with the characteristics of structures and operations in Leamington; thus understanding the type of fire protection services required.

And further, that a database be developed from annual review to document the risk and impact of fire.

Background Notes to the Recommendations:

Impact of Fire/Risk Assessment

The Leamington Fire Department has undertaken a basic assessment of the impact of fire and other emergency incidents, a risk assessment and the loss of potential of such incidents in the community. The various types of occupancies in the community and consequences of fire on the local economy, on employment, on the municipal assessment and tax base, social impacts, environmental damage and loss of historical structures have generally been reviewed. For example, a significant fire loss at a major employer such as H. J. Heinz Ltd. could have a major impact on employment in the community and on the local tax base. Similarly, a fire at a building such as the Kinsmen Recreation Complex or Leamington District Memorial Hospital could result in the loss of an important component of the community's recreational and medical resources.

It is critical to maintain an understanding of the impact of fire and the fire risk in the community in order to develop fire prevention, protection and response programs and secondly, to allocate resources to prevent fire incidents and thirdly, to protect the citizens and property in Leamington.

This recommendation suggests that the department adopt a policy to review on an annual basis the impacts and risks of fire.

The review will consist of a comparison of the economic changes which have occurred in Leamington over the past year, the demographic changes, a comparison of assessment figures and tax rates, as well as fire protection costs.

The review will also consist of a simplified risk assessment, which will identify any change in the areas of:

- Predominant types of building and or occupancies;
- Fatalities and/or injuries;
- Predominant types of emergency calls;
- Potentials for significant loss of life or property;
- Impacts of loss of life or property;
- Resources available to address local risks.

To achieve this objective the Fire Department will need to develop a database, which will be used to document the risk and impact of fire.

There should be minimal or no financial impact on the corporation to implement this recommendation. The only impact would be the time required for administration staff to develop and prepare written policy statements for presentation to council.

Recommendation # 14:

That the Municipality of Leamington continue to provide the Leamington Fire Department with sufficient resources to ensure that the public are informed and educated on the delivery of fire services and the impact as to how fire may affect their lives.

Background Notes to the Recommendations:

Public Attitude:

The office of the Fire Marshall has noted “North Americans tend to be more complacent about fires and the resulting losses than other parts of the industrialized world.”

It is important to understand the public’s attitude toward fires so that properly designed public fire safety education programs can be delivered which will result in lower fire losses.

Public attitudes may vary among various sectors of the community based on age (i.e. School children, adults, senior citizens); type of property ownership (i.e. commercial, residential, industrial) etc.

It is acknowledged that little quantifiable data is available to determine or rate public attitudes toward fire prevention and protection, however, it is generally perceived by the Leamington community that a very high level of satisfaction with fire prevention services is realized by the industrial, commercial and residential sectors.

The primary source of information regarding public attitudes comes from the personal experience of the Leamington firefighters, who are in daily contact with citizens of the

community in both areas of fire protection and prevention. These experiences would appear to indicate that while the department and its personnel are highly regarded and respected in the community, the public's expectations of the department to have a solution for all sorts of problems and to respond to all emergency incidents is also very high. Public reliance on the fire service is significant.

While public response to fire safety, prevention and education programs appear to be satisfactory, it is essential that these programs continue to be delivered to educate the public about how fire may affect their lives and what steps can be taken by individuals to minimize and mitigate the effects and results of fire.

RECOMMENDATION #15:

That the Fire Department update its residential smoke alarm policy to reflect current municipal needs and secondly that the municipal fire regulating by-law be amended to include a statement on residential smoke alarms.

Background Notes to the Recommendations:

Residential Smoke Alarms

Residential smoke alarms are required in single-family dwellings as a result of a 1998 amendment to the *Ontario Fire Code*. There is a by-law in effect in the Municipality of Leamington regarding residential smoke alarms; however, the existing by-law has not been updated since amalgamation.

The Fire Department promotes smoke alarms in all of its public education programs

RECOMMENDATION #16:

That the Fire Department continue its policy of maintaining fire alarm systems to the standards established through the Ontario Fire Code.

Background Notes to the Recommendations:

Fire Alarms Systems

The *Ontario Building Code* requires the installation of fire alarm systems in specific occupancies, while the *Ontario Fire Code* provides for the maintenance of these systems.

Fire Alarm systems exist where required, however the systems are often not fire code compliant due to lack of maintenance.

The maintenance of fire alarm systems is addressed as part of an inspection.

RECOMMENDATION #17:

That the Fire Department, through its fire education programs continue to demonstrate the benefits and utilization of the 911 system.

Background Notes to the Recommendations:

The Municipality of Leamington has an enhanced 911 system in place. Problems, which surface from time to time, are generally as a result of the caller not having the correct information to give to the 911 operator. This can range from not having or knowing the correct address to not having correct or sufficient knowledge of the nature of the incident. There can also be a hesitation by the general public to call 911. People can be reluctant to categorize the circumstances as an emergency. They often wait until the situation escalates until there is no question that they need help. This often results in significant negative impact in the mitigation of an incident regardless of its nature.

With the exception of a possible “direct station” monitoring approach the enhanced 911 systems best suits the needs of our citizens. The issues identified above can best be addressed through public education programs.

RECOMMENDATION #18:

That the Fire Department continue with its present policy of command and control services for an emergency situation.

Background Notes to the Recommendations:

Fire ground command and control serves a critical function on the fire ground. Successful operations require a well-planned, coordinated attack. Firefighter and civilian safety is seriously jeopardized without proper command and control.

The Leamington Fire Department currently utilizes vehicle #142, the Fire Chiefs and/or Deputy Fire Chief’s vehicle as the initial onsite command centre. Should a prolonged emergency exist arrangements for a mobile command centre could be reviewed with other county emergency agencies to assist; i.e. City of Windsor Command Centre.

At this time, no significant areas of improvement regarding a command centre have been identified.

RECOMMENDATION #19:

That the Fire Chief in conjunction with the Deputy Fire Chiefs and Fire Captains will annually review the Fire Department's Operational Guidelines to ensure that said guidelines reflect the municipal E & R bylaw.

Background Notes to the Recommendations:**Operating Guidelines**

Ensuring safe, effective, and efficient fire ground operations is dependant on personnel operating within accepted parameters. Operating guidelines provide firefighters with those parameters. The Leamington Fire Department has a series of operating guidelines intended to cover all aspects of operations. These guidelines are constantly reviewed and revised, if necessary, to remain current. Operating guidelines are an intimate part of command and control. The operating guidelines are to be reviewed annually and amended as deemed necessary.

It should be noted that operating guidelines should reflect the revised levels of service and policies of the Fire Department and the revised establishing fire bylaw. Specifically, where the operating guidelines do not reflect the E & R bylaw, or are not presently sufficient they should be revised or created.

RECOMMENDATION #20:

That the Fire Department continue to strive for a safe working environment for all of its firefighters by providing the appropriate fire safety training/ information, and instruction under the requirements of the Occupational Health and Safety Act.

Background Notes to the Recommendations:**Firefighter's Safety**

Firefighting can be described, at best, as extremely hazardous. Conditions on the fire ground can deteriorate in seconds and place personnel in a very real life-threatening situation. The Fire Department has a very active health and safety committee, which makes recommendations to the Fire Chief on existing fire equipment and firefighting procedures.

RECOMMENDATION #21:

That the municipality continue to provide the Leamington Fire Department with modern, effective emergency apparatus and equipment.

Background Notes to the Recommendations:**Apparatus and Equipment**

The tools for the trade for the fire service are constantly changing and improving. So, too, are the demands of firefighting. Risks to public safety are numerous, many of which go unnoticed in our daily routines. The cost of protecting our community from these threats is expensive.

In the opinion of the municipal firefighters the firefighting equipment and vehicles utilized are of superior value and condition...a tribute to administration and firefighters. However, it is suggested that the vehicle replacement plan for the Fire Department be updated/prioritized and presented to council for consideration and inclusion in the strategic plan.

Vehicles and Equipment:**1. Current Vehicle Inventory:**

- a) The fire department responds to emergency calls with the following vehicles:
- b) Unit 144 – is a 1979 Fire King Pumper with a 1050 gpm pump and an 800-gallon water reserve tank. (Scheduled for 2004 Replacement)
- c) Unit 147 –is a 1989 Ford Superior Pumper/Tanker with a 625 gpm pump and a 1500 gallon reserve tank. (This unit also carries two 1000-gallon portable water tanks.)
- d) Unit 145 –is a 1994 Spartan Superior Pumper/Snorkel with a 1250 gpm pump and a 300 gallon reserve tank. It is equipped with a 50’ water tower apparatus.
- e) Unit 142 – is a 1998 Freightliner FL80 Rescue/Command vehicle with no pumping capabilities. Designed to carry manpower and equipment.
- f) Unit 146 – is a 1999 Ford Superior Pumper with a 1250 gpm pump and a 1000-gallon reserve tank. This unit is equipped with a water dump system and can be used as a second tanker in an emergency.
- g) Unit 143 – is a 2000 E-One, 95” Aerial / Platform with a 2000 gpm pump and a 300 gallon reserve tank. The water tower can be used as a rooftop portable hydrant or a water deluge monitor as the need arises.

- h) Units 140 / 141 & 148- are Four Wheel drive command vehicles assigned to each Chief Officers. Units 141 & 148 are pickups and 140 is a SUV Chief's vehicle.
- i) Unit 150 – is a 1986 / 18 foot Boston Whaler Rescue Boat equipped with a 100 hp outboard. This unit is equipped with drag recover equipment, bottom scan equipment, GPS equipment and a marine radio.

2. ***Vehicle Replacement Plan:***

The Leamington Fire Service has a replacement program of 10 years for Chief's vehicles and a 25-year replacement policy on all heavy-duty vehicles. The 1979 King Pumper has been budgeted for and is scheduled for replacement in 2004.

Our vehicle replacement plan is as follows:

a) ***Vehicle Maintenance Program:***

All department heavy-duty vehicles have their annual drive train service performed by a local heavy-duty garage. Annual Ministry of Transportation Safety Checks are also completed locally. Annual Fire Pump Testing, Aerial Water/Tower Devices and other specialized equipment, are serviced and repaired by factory trained and certified emergency vehicle dealer mechanics.

3. ***Equipment:***

a) ***Inventory of "Quick Wear" Equipment: (i.e. protective clothing, hose etc):***

Firefighter turnout gear is inspected in December of each year by the Fire Chief and is replaced on an as is needed basis. Currently the turn around for the department's emergency turnout gear is as follows: after 4 years it is moved to a backup position for the firefighter and a new set is purchased for primary response protection. This varies by how much interior firefighting each particular member is subjected to during the year and turnout gear is only replaced as needed.

b) **Fire hose replacement is an ongoing process and is tested and replaced as required. Each hose is tracked by number and tested annually.**

c) **Self Contained Breathing Apparatus is repaired, annually tested and repaired in house by factory trained technicians and is on a 10-year replacement program. Compressed breathing air bottles are hydrostatically tested annually locally and are on a 15-year replacement program. Both air packs and bottles are numbered, have individual files and are cleaned and refilled after each wearing. A system is in place that allows any firefighter to tag and pull from service any SCBA that does**

not perform as expected.

4. ***Inventory of “Long Wear” Equipment: (i.e. portable pumps, generators etc):***

All generators and portable pumps are run weekly as part of the Duty Squads checklist requirements and all small engines are serviced annually by qualified mechanics. During weekly checks or at anytime the equipment does not perform as required, any firefighter can pull from service and tag. This equipment is replaced on an “as-needed” basis.

5. ***Equipment Maintenance Program:***

All equipment is checked on a weekly or monthly bases depending on a program setup and monitored by the Deputy Chief of Operations. Duty Squad Wednesday and Sunday work assignment sheets assign the maintenance or testing for that particular week and assure that the department’s maintenance program is followed.

6. ***Building and Materials:***

The Fire Hall and facilities are primarily maintained by contractors (grass cutting/snow removal, housekeeping, painting, minor repairs).