

# **City of Kawartha Lakes Fire Rescue Service**

## **Fire Prevention Division**

### **Report to Master Fire Plan Task Force**



*Submitted by*

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# MASTER FIRE PLAN TASK FORCE

## Report of the Fire Prevention Division

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# **MASTER FIRE PLAN TASK FORCE**

## **REPORT of the FIRE PREVENTION DIVISION**

### **INTRODUCTION:**

The legislation under which Fire Prevention operates is the **Fire Protection and Prevention Act 1997**. In the act the following is specific to all municipalities:

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

As a minimum acceptable model, municipalities should provide the services listed below.

1. A **smoke alarm program**: In the summer of 2003 the smoke alarm program was implemented. The program tracks the installation of working smoke alarms in residences. Action is taken to ensure that smoke alarms are operable before any fire personnel leave that residence. Each Fire Prevention Inspector and every fire station was issued a resource kit containing smoke alarms, CO detectors, extra batteries, fire safety information, tool kit, and waiver forms to be left with the home owner. Partnerships were entered into to have a ready supply of donated smoke alarms and batteries.
2. **Fire Safety Education Material**. Fire safety education material is distributed to residents/occupants of homes when the fire service conducts home in sections. Fire prevention regularly attends public events where they display fire safety material for distribution to the public. Fire safety material is regularly left on display and for distribution at City Service Centres and City libraries. Fire Prevention personnel regularly assist residents through responding with fire safety materials
3. As a legislative requirement, **Inspections** are conducted upon complaint or when requested to assist with code compliance (including any necessary code enforcement): Any complaints of fire safety issues from members of the public are acknowledged within 2 working days and dealt with in a timely manner. All buildings must, by law, conform to the Ontario Fire Code. Inspectors enter buildings as Assistants to the Fire Marshal to ensure the fire code requirements are being met.
4. **Simplified Risk Assessment**: This is a comprehensive document outlining the fire risk of a municipality, based on demographic, building stock and fire loss statistics. *See Appendix*

The City of Kawartha Lakes has met all these minimal requirements. and has obtained accreditation from the Fire Marshal's office as having achieved this model.

## **Pre Amalgamation**

Prior to amalgamation, fire prevention in Victoria County was a hit and miss proposition. Few Municipalities were able to achieve the legislated requirements of the **Fire Protection and Prevention Act** including its Regulations. Few fire inspectors were hired or appointed and those who were attempting to do the job lacked sufficient related education and training. Municipalities would find it difficult to comply with the legislated requirements under the **Ontario Fire Code**. Public education was limited to attending the local schools for the annual fire drill inspection.

## **Building Code v.s. Fire Code**

The **Building Code Act** is the authority which oversees the construction of new buildings, renovations of existing buildings and any change in use of that building, which includes all building components, such as fire and life safety systems. This act is administered through the **Building Code**. Once the property is in compliance with the building code, building inspectors have no further jurisdiction over that building. The building then falls under the jurisdiction of the **Fire Code** from that day forward to maintain it to the standard to which it was built. When the Building Code is not properly nor completely applied, it falls under the fire department to rectify items overlooked.

Another function of the **Fire Code** is to bring buildings constructed without the benefit of a building permit or constructed prior to the introduction of any building code, up to a minimal level of fire and life safety standards. This is known as **retro-fit**.

**Retro-fit** legislation was first introduced into the Fire Code in 1987 with the final introduction brought in during 1994. Property owners were given a grace period of two years to bring their properties into compliance. An additional two years to comply could have been obtained by application to the Chief Fire Official. All retro-fit should have been completed by no later than July of 1996. Unfortunately, in our municipality retro-fit is still in its infancy and is far from being complete.

### **Differences:**

The **Building Code** is a construction document, administered by building inspectors. It covers new construction and renovations to existing buildings. The **Fire Code** is a maintenance document, administered by fire inspectors. It ensures that fire and life safety provisions in a building are kept up-to-date.

## **Executive Summary**

Since the inception of the City of Kawartha Lakes the Fire Prevention division has grown to have a high level of credibility by our peers in other municipalities, educators and local trades people. Property owners are dealt with in a fair, consistent and universal manner with respect to fire code issues applied to all properties. The ongoing success of the **Risk Watch** Program has been recognized as a Provincial example. The **Risk Watch** Program is a childhood injury prevention program presented through our elementary schools.

The City of Kawartha Lakes has met all the minimal requirements of the Ontario Fire Marshal's Office for the model based on effective fire prevention and has obtained accreditation for having done so.

In these past 5 years the demands on fire prevention personnel have escalated. The increased public awareness of fire code requirements and fire safety has generated an increased demand for service within our community. The effect of an ever-growing population will only add to the demand in the future. As the GTA continues to expand, the City of Kawartha Lakes will see more growth in all aspects including residential, commercial and industrial development.

The Fire Prevention Division has operated with few historic precedents, therefore, leaving us to deal with issues to the best of our combined abilities. The lack of enforcement in some areas could still result in additional liabilities to the City.

Having full time employed inspectors and a public educator allows us to serve the public with a uniform and professional approach. Response to fire code related complaints and requests are consistent and performed in a timely manner. Public education programs are available to ratepayers and are delivered throughout the City. All staff have or are seeking Fire Prevention Officer accredited certification.

Any joint venture with other divisions of the Fire Service toward establishing a central location for assembly opportunities, would have a positive impact toward public education. Such a location would allow for storage and dispatch of a proposed safety trailer, thereby enabling fire prevention to go on the road for those who have travel barriers.

To enhance our overall effectiveness to meet the requirements of the legislation, the sharing of legal staff experienced in fire code matters with other municipalities would be an opportunity. This would lead to a more cost effective and efficient approach to prosecution.

All Fire Prevention personnel are trained fire fighters. Fire Prevention personnel are able to respond to identified emergencies throughout the working day as required.

## **CURRENT:**

### **Staffing – Human Resources**

#### **Strength**

- Independence of inspectors – ability to work on their own from offices throughout the City.
- Inspectors compatibility, ability to communicate and diversity of educational backgrounds compliments the division’s ability to work efficiently in delivering programs of property inspection and public education.
- The OFM accredited Fire Prevention Officer certification program is based on a standard developed by the professional standards setting body and is provincially accredited and recognized. 1 inspector is currently certified and three others expect to be certified by the spring of 2007.
- Mandatory education is required to maintain certification through a point system. Points are over a 5 year period. A certain number of points are required over a variety of job competencies. Some examples of competencies which accumulate points are:
  - attending seminars;
  - attending court;
  - media publications;
  - educational courses in related fields.
- Bill 124 is legislation governing the Building Code Act for anyone who does inspections and plans review for new construction under the Building Code. Two inspectors are currently certified under this Bill. As such, these inspectors have input for construction of new properties for fire code issues addressed under the Building Code.
- Public educator is working towards certification as a Public Educator under the OFM guidelines
- The Insurance Underwriters of Canada have suggested the following model for staffing of a fire prevention division within a municipality:
  - 1 inspector for every 15,000 population
  - 1 public educator for every 50,000 population
- Fire Prevention staffing in Kawartha Lakes is presently 4 inspectors and 1 public educator. *See Appendix re: staffing chart*

#### **Threat**

- Maintaining certification under the point system subtracts from our ability to continue to enhance customer service.
- Maintaining an enhanced service with existing staff levels with the onset of any increase in population and therefore, attendant services in either building inspection for fire code compliance or public education programs.
- Increasing demand for inspections from rate payers is taxing our manpower
- Time commitment to stay current with changing codes, legislation and regulations from the Fire Marshal’s Office

### **Opportunity**

- certification of staff adds credibility to the City of Kawartha Lakes
- Certification and standardization creates a level playing field for inspections across the City of Kawartha Lakes, as was not the case prior to amalgamation.
- Clerical support staff dedicated to fire prevention would be a welcome addition to assist the enhanced program and educational opportunities.

### **Staffing Placement and Accessibility**

#### **Strength**

- Fire Prevention personnel are accessible to ratepayers, having offices in Omemee, Bobcaygeon, Coboconk and Kirkfield and staffed with customer service representatives who provide assistance through answering phones, taking messages and issuing burn permits.
- E-mail links through city web site make fire prevention personnel accessible to the public regardless of their physical location.
- Fire safety information is available through the City's web page
- Available technology - cell phones, 2-way radios and paging - makes communication more efficient for internal operations and public contacts. Digital photography enables us to share opinions without associated travel. It provides us with evidence as well as a pictorial history of a property.
- Available locally for consultation, assistance and resources to any of the 21 fire stations for prevention and public education requests/clarifications
- Provide support to responding divisions by responding to emergencies when required.

#### **Weakness**

- Even though our offices are spread out through the City, there is the fact that our geography is large, amounting to 3059 sq. km. And despite the fact that technology makes communication easier, required travel time is unavoidable and does create challenges. *See Appendix re: staffing chart*

#### **Threats**

- Closure of any City Service Centre. This would force re-location of fire prevention personnel so affected and also, remove accessibility to fire related information presently available to the public, e.g. burn permits.

#### **Opportunities**

- Increase availability of fire safety information on the City's web page giving public access to such things as, on-line burn permits, fire safety plan templates, burn ban announcements
- Create a web page exclusive to Fire Prevention through working with the City's Communication Officer
- A fully integrated telephone system, covering all departments and all buildings in the City of Kawartha Lakes, with extensions and voice mail for all employees would provide a more customer friendly and efficient service.

## Public Education Programs

### Strengths

- The success of the **Kawartha Lakes Risk Watch Coalition** is recognized by the Fire Marshal's Office and is used as an example of a model for other coalitions. Risk Watch is a comprehensive injury prevention program for elementary school aged children. It is a partnership of community agencies and schools working towards providing safety lessons for children.
- **Public and community events**, e.g. fairs, home show, malls, are regularly attended by Fire Prevention. Displays of fire and life safety information are displayed and personnel are available to answer the concerns of residents and to engage in informal conversations related to home and work place safety.
- The **TAPP-C** program is a provincially endorsed multi-agency educational and assessment program to address the problem of children who are identified as fire setters. TAPP-C stands for The Arson Prevention Program for Children. The fire service is responsible for providing one of the 2 components of this program, the education about fires and fire prevention. With increasing frequency completion of this program by juvenile fire setters is being ordered by the courts as a condition of sentencing.
- Our **Smoke Alarm** program tracks the installation of working smoke alarms in residences. Action is taken to ensure that smoke alarms are operable before any fire personnel leave that residence. Each Fire Prevention Inspector and every fire station carries a resource kit containing smoke alarms, CO detectors, extra batteries, fire safety information, tool kit, and waiver forms to be left with the home owner. Partnerships have been entered into to have a ready supply of donated smoke alarms and batteries.
- The **Older and Wiser** program is delivered to seniors groups. This program promotes fire and life safety in the home for residents who are in the age 65+ population group. Topics include: cooking safety; care and use of smoking materials. care and maintenance of smoke alarms, proper use of extension cord wiring, falls prevention, heating appliances, use of the 911 service and distribution of appropriate literature.
- During **Fire Prevention Week** each October, a comprehensive education program is delivered. The program includes presentations in schools, public displays of fire and life safety material, monitoring of school fire drills as required by the Ontario Fire Code, submissions to media, eliciting support from the media, public appearances by SPARKY, and our Chief For the Day contest for elementary school children.
- Our in service **Home Inspection** program is conducted by on duty crews. Full time suppression personnel visit area homes during regular working hours. The program extends from May through to and including September each year. Homeowners willing to participate are advised of any fire safety hazards and their smoke alarms are checked. Fire safety literature is left on the premises. It promotes a positive image for the fire service and a pro-active approach to fire safety.
- The dedication of **volunteer firefighters** from some divisions is crucial in bringing fire safety message to the public. These volunteers live in the area they serve enabling them to address their community on a more personal level.

## **Weaknesses**

- The communication of pertinent information to the public, e.g. burn bans, smoke alarm safety, is hampered due to our extended geographical area. As not one media outlet covers the entire City, this makes delivering messages to the entire City population a challenge. Being able to depend on a consistent flow of information to outlying areas is impossible.
- The in service Home Inspection program is conducted by on duty crews. This makes the program only available in Lindsay, Omemee and Bobcaygeon and only during duty hours. The program is not available in areas of the City served by volunteer firefighters.
- Currently lack an appropriate central assembly area for presentations to the public. Such a facility could be used for school groups or community gatherings for fire safety presentations. Such a facility could be incorporated in a fire service training centre.

## **Threats**

- To maintain public interest in the continuing fire safety messages it is necessary to become more creative in our delivery. Finding creative resources can be taxing on personnel and can lead to burn-out.
- With to-day's explosion of media information, it is more and more difficult for the fire service to motivate the public with new and creative ideas in presenting our messages.
- As inspectors of properties we must enforce fire safety through building owners. It is difficult to then approach these same people and ask for funding to support public education activities. Such requests may present themselves as a conflict of interest.
- Volunteer firefighters who continue to donate their time and energy towards educating the public, may be unwilling to keep the commitment to serve as the demand for this type of interaction increases.

## **Opportunities**

- Greater visibility of the fire service can be achieved through maintaining and nurturing media contacts.
- Promote media coverage with "good news" (proactive) stories, e.g. Kent St. fire where retro-fit separations prevented fire spread; ski with Sparky at Devil's Elbow where building fire safety features exceeded fire code requirements and reservoir provides water supply for fire fighting in the neighbourhood.
- Enhance the relationship with the City's Communications Officer for greater spread of fire safety messages and input towards public display.
- Expand in service Home Inspections in volunteer areas with volunteer firefighters and/or fire prevention personnel. This would improve service, especially, for our seasonal residents.
- Create an assembly area as part of a possible fire service training centre where various public groups could be invited for presentations related to fire and life safety.
- Additional opportunities for spreading fire safety messages may include:
  - fire prevention road signage at City entrances and other key locations
  - fire hazard index indicators signage
- Establishing email contact lists for cottage associations, trailer camps and marinas would assist in spreading messages.

- Work with neighbouring municipalities in sharing of ideas, resources, aimed at increasing public awareness of fire and life safety issues.
- Create a more visible means of recognition for volunteer firefighters that are donating their time as this may encourage their continued commitment.

## Coalitions and Partnerships

### Strengths

- Coalitions and Partnerships are another vehicle to promote the fire service and increase our visibility in the community.
- Coalitions/Partnerships already established, e.g. Tim Horton, McDonalds, Dairy Queen, Health Unit, Community Care, Canadian Tire, Lindsay Square Mall, Zellers, Kawartha Lakes Police Service, OPP, enhance our efforts towards in highlighting fire and life safety issues.
- Our **Risk Watch Coalition** partners with Coalitions from neighbouring municipalities to share resources and information.

### Weaknesses

- Community resources are limited due to the limited number of businesses able to be approached for financial support.
- Establishing much needed coalitions and partnerships can diminish from time for ongoing daily activities and programs.

### Threats

- Fire code enforcement may be perceived as a conflict of interest and may create a perceived obligation for owners when asked for financial or other support to public education programs.
- Establishing partnerships with business owners may be jeopardized or be perceived as favourable treatment when said businesses come under the scrutiny of the fire code.
- A concern for the fire service is repeated requests for support should we become dependent on financial contributions.

### Opportunities

- Any enhanced relationship with fire departments in neighbouring municipalities in standardization of issues, e.g. dealing with school boards, adds to our viability and utilizes resources of all parties to best advantage.
- The completion of a permanent smoke/safety trailer would require the support of community partners in order to achieve financial and in kind contributions. Such a trailer would allow Fire Prevention/ fire fighters to take enhanced programs to the people, e.g. more hands on, more visual representation. As of February of 2006, a committee has been established to pursue this venture.
- Financial support may be achieved with future development in the City of Kawartha Lakes, as any increase would enable a broader base from which to draw financial support for fire and life safety programs.

## **Enforcement and Prosecution**

### **Strengths**

- The Fire Prevention Division has attended training seminars regarding enforcement and prosecution, as well as attending courses at the Ontario Fire College.
- Public perception is growing that the Fire Prevention division is taking a fair but firm approach to enforcement by working with property owners to bring properties into compliance, and at the same time not tolerating any unreasonable delays. This approach results in safer buildings, compliant buildings, greater residential safety and enhanced sense of well-being on the part of residents. Enforcement through the courts is used as a last resort to achieve compliance.

### **Weaknesses**

- Local prosecutors lack the expertise in dealing with Fire Code issues in the courts. Therefore there is a need for access to more experienced legal personnel in fire code issues.
- Fire Inspectors are not named as provincial offences officers under bylaw and therefore cannot serve part III summons, making it necessary to call upon a by-law officer to serve a summons.
- Despite the fact that through enforcement, public education and word of mouth, there is still a lack of awareness and knowledge in some areas of the responsibilities on the part of property owners concerning fire code regulations.

### **Threats**

- Municipal liability may exist related to buildings inspected prior to amalgamation. Former fire prevention personnel did the best they could with the limited time, training, and education available to them, but discrepancies in inspection practices have been found to exist.
- Present liability exist as some City owned buildings are not yet in compliance with the Fire Code. We feel it is most important that the city bring their properties into compliance with the Ontario Fire Code, not only to set an example to the taxpayers, but also lower the liability to the City should a fire occur in one of our own properties.

### **Opportunities**

- The opportunity to share legal staff experienced in Fire Code Prosecution with another municipality would provide a cost effective and efficient prosecution process.
- Another option may be to retain legal services experienced in Fire Code Prosecution from the private sector.
- Fire Prevention personnel sworn in as Provincial Offences Officers for purpose of serving summons for Part III offences would eliminate the need for calling upon a by-law officer.

## **Equipment**

### **Strengths**

- With the equipment available each inspector/ public educator is versatile. Each have their own vehicle, making access to all parts of the City convenient and easy.
- Fire Prevention personnel are able to assist suppression personnel responding to emergencies, when required. Each Fire Prevention vehicle is equipped with 2-way radios emergency lights and sirens, our own personal protective clothing and first aid equipment.
- Each inspector/ public educator has their own computer, digital camera, etc., bringing ourselves closer together in light of our extensive geography without having to always physically travel. Furthermore, all required paperwork is being dealt by the individual inspector.

### **Weaknesses**

- The lack of audio visual equipment makes sharing necessary, meaning possible delays as scheduling and pick-up/delivery is required.

### **Threats**

- Technological advances occur so rapidly it is hard to stay abreast with up to date equipment.

### **Opportunities**

- Having a variety of types of vehicles is an asset to Fire Prevention, making it possible through sharing of this resource to use the most appropriate vehicle. Therefore, upon vehicle replacement, consultation should take place with personnel towards making the best choice.
- The eventual introduction of wireless technology including laptop computers, throughout the City would enhance the efficiency of inspectors in the field, e.g. compliance reports and burn permits, making it unnecessary to always have to return to an office to complete reports.
- The establishment of a central building for the fire service including a training centre for firefighters would enhance the possibilities for public groups to attend fire safety presentations, bringing presentation equipment, such as projectors, hazard house, under one roof for easier accessibility. In such a facility, there would be the opportunity to establish a museum of fire fighting artifacts.

**RECOMMENDATIONS: - SHORT TERM, MID TERM, LONG TERM - Priority**

<b><u>Short</u></b>	<b><u>Mid</u></b>	<b><u>Long</u></b>
<p>Twin with another municipality in sharing a prosecutor for enforcement and legal support. Fire Code charges come to court less frequently and therefore, a prosecutor familiar with the code can proceed with a more informed level of confidence.</p>	<p>Provide awareness and training to local prosecutors and Justices of the Peace on Fire Code related issues. Have ready access to legal representation and advice.</p>	<p>Have a legal Department for the City of Kawartha Lakes, staffed with personnel trained in handling charges under the Fire Code and City by-laws.</p>
<p>Create web page exclusive to Fire Prevention for public access.</p>	<p>Expand the web page to include information on fire related by-laws, the Fire Code, templates for fire safety plans.</p>	<p>Maintain and adjust to developing technology.</p>
<p>Continue partnership with the Health Unit towards Child Car Seat Clinics held in firehalls. Child Car Seat clinics promote life safety in transporting children. As a cost effective measure, greater safety for children may result in fewer necessary responses of fire vehicles and less emotional response for some of our firefighters.</p>	<p>Initiate training as car seat technicians among volunteer firefighters. This will enhance the furthering of usage of firehalls in the outlying areas for public clinics. Involvement in this program enhances the distribution of fire safety information.</p>	
<p>Continuing inspection program brought on by complaint and request, brings buildings in to a safer state of repair. As a cost effective measure, safer buildings mean greater life safety for occupants. Fires which do occur are contained to a smaller area and subsequently reduce time and resources required for suppression activities.</p>	<p>To be able to establish a pro-active versus a reactive inspection program, aimed at routine inspections rather than inspections prompted by complaint and request.</p>	<p>To establish a self-inspection program, which emphasizes responsibility of the owners with support from Fire Prevention personnel. Self-inspection refers to the owner acknowledging his responsibility and verifies his property is in compliance with the fire code.</p>

Continue support of Home Inspection program by full time crews with support from Fire Prevention personnel.	Expanding the Home Inspection program beyond the communities served by full-time firefighters, especially to include our remote and seasonal population.	Expanding the role of the public educator to address the lack of public awareness to our remote and seasonal population.
Acquiring a fire safety trailer. Already established, this program brings fire safety education to all areas of the City.	Continue planning of the trailer, with special attention to developing further partnerships and coalitions.	Safety Village with population expansion will support the continuing use of the safety trailer.
With existing population, continue present programs in public education and property inspection.	Monitor any increase in population as a result of development to ensure the enhanced service is maintained.	With any increase in population as a result of development, additional staff will be required.
Continue presentations upon request to seniors groups, especially related to events promoted by <b>Community Care</b> . Kawartha Lakes has greater than the provincial average of those 65 years and older as part of its population base.	Enhance existing partnerships with community groups to further access seniors in our community, towards ensuring their fire and life safety.	Monitor census data with reference to population figures.
Keep existing programs in public education and property inspection current and active. Present involvement is reactive rather than proactive.	Without jeopardizing existing programs, make efforts to become more pro-active with programs.	The Fire Prevention division will be operable on the basis of pro-active planning of programs and services.

**City of Kawartha Lakes Fire Rescue Service**

**Fire Prevention Division**

Staffing Levels

	Kawartha Lakes	Kawartha Lakes seasonal	Stratford	Windsor	Peterborough	Barrie	North Bay	Woodstock	Huntsville	Chatham-Kent
Population	73,000	100,000	32,000	203,000	74,000	150,000	56,000	35,000	20,000	110,000
Area (sq km)	3,059	3,059	22	121	59	77	315	30	703	2,458
Area per Inspector (Sq km)	612	612	7	8	15	11	105	10	352	819

Inspectors	4	4	2	12	3	5	2	2	1	3
Public Educators	1	1	1	3	1	2	1	1	1	0

Population Per Inspector	14,600	20,000	10,667	13,533	18,500	21,429	18,667	11,667	10,000	36,667
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Population Per Public Educator	73,000	100,000	32,000	67,667	74,000	75,000	56,000	35,000	20,000	
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Recommended Staffing - 1 Inspector per 15,000 population - 1 Public Educator per 50,000

Area info from Stats Canada

Other data from fire departments in respective municipalities

Barrie - asking council for more staff

North Bay - report to council recommends increase in staff



Before and After shots of commercial cooking operation – charred wood was found when old system was removed – new system (on the right) is in compliance with NFPA 96 – stainless steel hood, proper clearances from combustible surfaces, adequate exhaust and fire suppression system.



The above kitchen cooking areas, demonstrate both unsafe equipment (on the left) and an approved commercial cooking operation (on the right).



Work done under the **Retro-fit** section of the Fire Code contained the fire to this unit and prevented fire spread to the remainder of this 3 storey building.



Sparky and friends at public events: Lady Mackenzie P.S., Devils Elbow Ski Resort



Photo: Deb Bartlett, *THIS WEEK*



The winner of a contest asking for fire safety measures in the home is presented with her free tickets to a hockey game.



**The City of Kawartha Lakes  
Fire Rescue Service**

**SIMPLIFIED RISK ASSESSMENT**

# **The City of Kawartha Lakes**

## **Fire Rescue Service**

### **SIMPLIFIED RISK ASSESSMENT**

#### **INTRODUCTION**

This study was conducted to fulfil a requirement of the Municipal Fire Protection Information Survey as per the Fire Protection and Prevention Act and to meet **The City of Kawartha Lakes'** responsibility to provide appropriate fire safety programs that address identified municipal fire concerns.

This was accomplished through the gathering and analysis of demographic, building stock and fire loss statistics.

This study was conducted and completed by Fire Prevention Inspector Tim Woodrow with assistance provided by members of the Fire Prevention Division and Fire Protection Advisor Peter Guiry from the Office of the Fire Marshal.

**Note:** The format for this document was taken from and used in conjunction with the Fire Marshal's Public Fire Safety Guideline PFSG 04-040A-03 "Simplified Risk Assessment".

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# **SIMPLIFIED RISK ASSESSMENTS**

## **COMPONENT 1 - DATA COLLECTION and ANALYSIS**

### **1.1. - DEMOGRAPHIC INFORMATION**

#### **1.1.1 – Demographic Profile**

Ages of population	#	% of Total Population	#	% of Total Population
	CKL	CKL	Ontario	Ontario
0-14	12,845	18.6%	2,232,750	19.6%
15-64	43,175	62.4%	7,705,130	67.5%
65 and over	13,159	19.0%	1,472,170	12.9%
<b>Total Population</b>	<b>69,179</b>	<b>100.0%</b>	<b>11,410,050</b>	<b>100.0%</b>

Source: Statistics Canada

<p><b>Vulnerable groups / individuals</b>  <b>Seniors – higher than provincial average percentage of population</b></p> <p>Ross Memorial Hospital – 160 beds to increase to 240 when addition completed</p> <p>Nursing Homes – Lindsay (4 – 416 beds), Bobcaygeon (2 – 154 beds), Fenelon Falls (2 – 127beds)</p> <p>Public Housing – Lindsay, Fenelon Falls, Omemee – 478 beds total</p> <p>Women’s Shelter – Fenelon Falls – 15 beds Lindsay – 18 beds</p>	<p><b>Population fluctuation</b>  Seasonal Inhabitants – tourist area</p> <p>Students (2/3 of the year) – Sir Sandford Fleming College – Frost Campus – rooming and boarding houses</p> <p>cottage, student housing, trailer parks</p> <p>Jail – rooming and boarding houses potential fluctuations as family members move in temporarily</p>
<p><b><u>Barriers to Public Education</u></b></p> <p>Access to young families with children not yet in school</p> <p>Large rural areas where no public transit exists, making it difficult to have contacts with these families with new infants and/or young children</p> <p>Over 65 age group who are partly shut-ins</p>	

## 1.1.2 - Analysis and Evaluation

### Demographic Profile Commentary

The higher than provincial average of seniors in the community brought on by proximity to the GTA and the attractiveness of retirement in this community make servicing of these individuals important. Over 13,000 of our residents, some 19%, are in this group. They reside in one of several seniors/care facilities, though most are still in their homes. Those residing in their own homes are the more difficult to reach with fire safety information.

Our 14 and under group amounts to almost 13,000 boys and girls. This total approximates 19% of the total population. Those aged 3 to 14 are fairly accessible to reach as they are of school age and we work closely with the schools systems. Those families with only very young children, 3 and under, are difficult to service, as they often do not use the institutions through which they might be contacted. Further, many live in rural areas and have no outside contacts.

### Demographic Profile Concerns

- 1. High seniors population:** Kawartha Lakes has 19% of its population aged 65+. The province of Ontario has just under 13% aged 65+. Clearly the seniors make up significantly more of our population than the provincial average. Due to our proximity to the Greater Toronto Area, this figure is likely to rise as retirees leave the big city and move to the City of Kawartha Lakes. (*Source: City of Kawartha Lakes Creating a Community Vision*) As many still reside in their own homes, finding innovative ways to access these people with fire safety information is important.
- 2. Seasonal residents:** Kawartha Lakes is traditionally a recreational area. With its many lakes, there are many cottages or second homes within the municipality. The seasonal population swells by some 27,000 people. (*Source: City of Kawartha Lakes Creating a Community Vision*) The incidence of trailer parks also follows the recreational path. With the tendency of anyone on vacation to “let loose”, those using recreational dwellings need to be reminded of fire safety measures, as fires also happen in “cottage country” while on vacation.
- 3. Young families with pre-school children:** This group tends not to have community links. Often these are young couples with new or babies or toddlers, sometimes new to the community where they live. Unless they have invested time in making local contacts, or local community members have taken the time to contact the new family, these families do not often meet organizations and institutions within the community until their children enter the school system.
- 4. Geographical Area:** Kawartha Lakes encompasses 3059 km<sup>2</sup> in area with a density of 22.6 persons per km<sup>2</sup>. In comparison Toronto has an area double that but with a density of almost 800 persons per km<sup>2</sup>. Clearly our population is very spread out, thus making it more difficult to service the people with public education, property inspection and emergency response.

## 1.2 - BUILDING STOCK PROFILE

### 1.2.1 – Occupancy Classification Inventory

Occupancy Classification		# of Occupancies
Group A	Assembly	139
Group B	Institutional	41
Group C	Private Dwellings	25,685
	Recreational Dwellings	6,756
	Other	
Groups D	Business & Personal Services	1400
Group E	Mercantile	1000
Group F	Industrial	217
Farms		1750
Special Risk Occupancies/Properties: (e.g. community centres, major employers)		
<ol style="list-style-type: none"> <li>1. <b>Pickseed:</b> storage of used PCBs</li> <li>2. <b>Superior Propane:</b> large storage of propane</li> <li>3. <b>Canadian Tire:</b> large department store – customers and employees</li> <li>4. <b>Lindsay Square Mall:</b> approximately 300,000 square feet of retail shopping</li> <li>5. <b>Century Theatre:</b> 3 screens; <b>Kinmount Theatre:</b> 5 screens</li> <li>6. <b>Academy Theatre:</b> older structure, retro-fitted</li> <li>7. <b>Ross Memorial Hospital:</b> multi floors with bed-ridden patients</li> <li>8. <b>Community Centres (24):</b> some very busy with large groups and sometimes alcohol being served</li> <li>9. <b>Arenas (9):</b> often large groups of spectators or participants</li> <li>10. <b>Williamson Fuels:</b> liquid fuel storage</li> <li>11. <b>lumber yards (numerous):</b> Bobcaygeon, Lindsay, Fenelon Falls, Kinmount, Coboconk, - large quantities of combustible material, stored outside and/or in sheds</li> <li>12. <b>Oakwood Agromart:</b> fertilizer and hazardous chemical storage</li> <li>13. <b>Feed mills:</b> Lindsay, Bethany, Oakwood, Woodville, Fenelon Falls – large storage of livestock feed + fertilizer</li> <li>14. <b>Remote Communities:</b> northern areas – former townships of Dalton, Digby, Longford</li> <li>15. <b>Northern Casket:</b> woodworking and spray operation – 150 employees</li> <li>16. <b>Fleetwood Canada:</b> travel trailer production – 300 employees</li> <li>17. <b>Jail:</b> 1200 inmates ; 350 employees</li> </ol>		
<b>Total</b>		<b>36,988</b>

## 1.2.2 - Information Analysis and Evaluation

### Building Stock Profile Commentary

Given the total area of the City of 3059 km<sup>2</sup> with a density of 22.6 person per km<sup>2</sup> there exists no concentration of any particular type of occupancy in any one place. Lindsay, seat of the City government, has about 1/3 of the entire population. Its main street consists of older buildings, usually with commercial/retail space at ground level with some having residential accommodation above the ground level. Additional concentrations of population exist in the villages of Bobcaygeon, Omemee and Fenelon Falls. Many of these occupancies are 2 unit dwelling above store fronts, which fall through the cracks of 9.8 retrofit. These properties have been upgraded to a retrofit standard regardless. The City has 6 apartment buildings, 5 low rise and 1 high rise. Continued monitoring of fire safety issues is necessary to ensure safety of these residents.

Approximately 4 years ago, it came to light within the former town of Lindsay, that there were approximately 150 inspection files in non-compliance. The majority of these files are now in compliance and all have been inspected with compliance expected shortly.

Special risk occupancies/properties are spread out through the City of Kawartha Lakes as has been identified above. This reduces the requirement on any one fire service division to be able to handle multiple incidents simultaneously. Further, where there are several such properties located in Lindsay, this fire fighting staff is full time with volunteer help as back-up. From the viewpoint of fire prevention inspection activities, these potentially high-risk properties are spread out among the fire prevention inspectors' areas.

Special risk occupancies, which house residents are regularly visited for the purposes of inspection and instruction in fire safety education to both supervisors and residents.

### Building Stock Profile Concerns

Based on the previously stated concerns of meeting the safety needs of the elderly and of the young, there is a need to be aware of the state of usage of buildings that are of an assembly and institutional nature. The fire service has in place public education programs for those occupying these types of buildings, an inspection program for these types of occupancies as well as pre-incident planning strategies for these structures.

There exist limited downtown core areas in Lindsay, Fenelon Falls, Omemee and Bobcaygeon. By and large, retrofit has been and/or is underway with good success in compliance. There is a potential for block fires due to the proximity of occupancies to each other.

While the areas to the north give cause for concern, it is recognized that there is very little population in the Dalton and Digby areas. There are no occupancies nor properties which pose special risks as existing occupants are families and those vacationers occupying cottages. Both these areas are serviced by the Norland Division and Carden Division fire fighters. Agreements are in place with the Ministry of Natural Resources covering the unoccupied former Longford township.

In Lindsay, should a special risk property have an emergency, volunteer firefighters can be called to assist. As well, firefighters from divisions immediately adjacent to Lindsay, e.g. Oakwood, Omemee, can now be called upon to assist without the need to activate the old mutual aid system.

For other areas where special risk properties are located, firefighters in those divisions are well briefed on the hazards that they could encounter should they be called to an emergency at any property. Again, neighbouring fire divisions are available should assistance be required.

# 1.3 - MUNICIPAL FIRE LOSSES

## 1.3.1 – Municipal Fire Deaths and Injuries

Occupancy Classification		2001		2002		Total Deaths + Injuries
		Deaths	Injuries	Deaths	Injuries	
Group A	Assembly	0	0	0	0	0
Group B	Institutional					
Group C	Residential	0	2	0	2	4
Groups D & E	Commercial			0	0	0
Group F	Industrial	0	0	0	0	0
Mobile Homes & Trailers						
Other		0	0	0	0	0
<b>Total Deaths / Injuries</b>		<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>4</b>

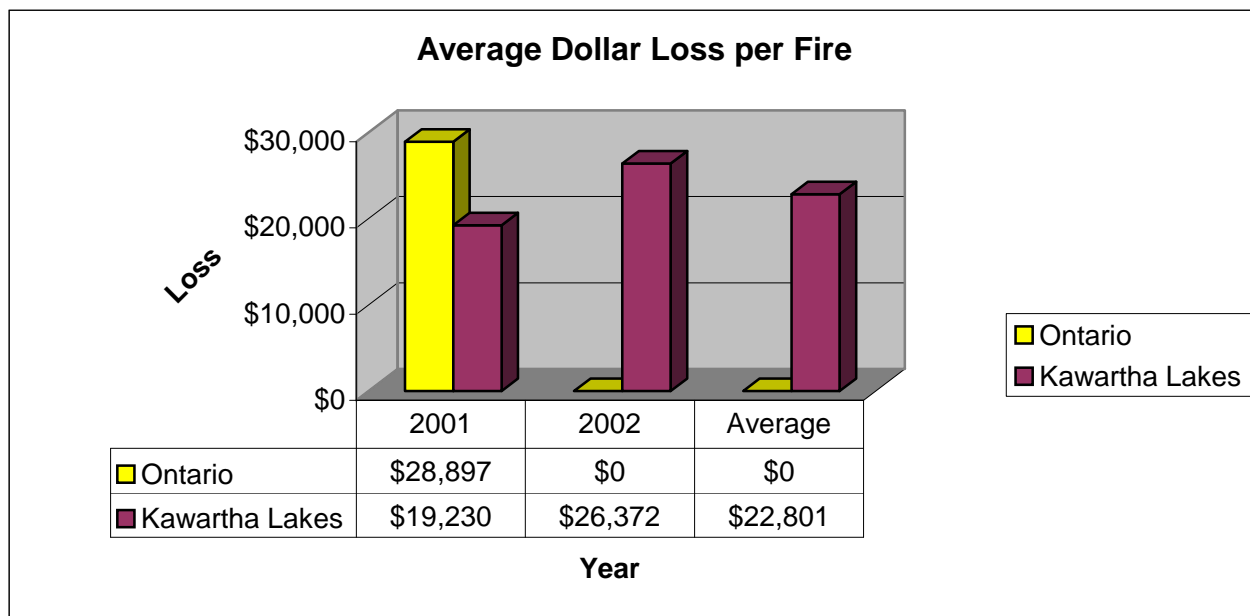
Source: OFM Data Services

## 1.3.2. – Municipal Property Dollar Loss

Occupancy Classification		2001		2002		% of Total Dollar Loss 2002
		# of Fires	\$	# of Fires	\$	
Group A	Assembly	4	10,850	2	5,200	0.2%
Group B	Institutional					
Group C	Residential	71	2,145,160	68	1,979,200	76.6%
Groups D & E	Commercial			2	1,100	0.04%
Group F	Industrial	1	25,000	7	526,200	20.4%
Mobile Homes & Trailers						
Other		42	88,165	19	72,760	2.8%
<b>Total Dollar Loss</b>			<b>2,269,175</b>		<b>2,584,460</b>	
<b>Total # of Fires</b>		<b>118</b>		<b>98</b>		100.04%

Source: OFM Data Services

## 1.3.3 – Municipal Losses Information Analysis and Evaluation



Source: OFM Data Services

## Municipal Fire Loss Profile Commentary

Just as shown provincially, losses due to fire in the residential sector predominate. While the City has experienced no fatalities due to fires in its first 2 years of existence, public education and inspection programs continue.

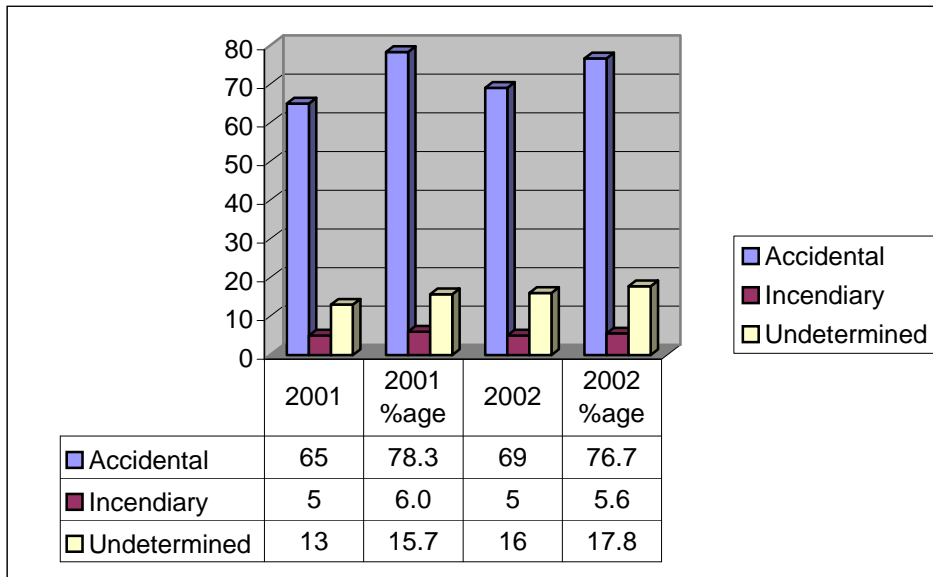
While it is encouraging that the residential dollar loss is down for the year 2002, the difference is just less than \$200,000, in the order of 10%. In subsequent years, this figure should be viewed carefully for trends. From the Area of Origin graph following, the largest number of fires start in a functional area, most of which are identified as belonging to residences. This data assists in delivering public education programs, as prevention inspectors have accurate data at hand to present to their audiences.

The Municipal Property Dollar Loss Table shows a significant jump in industrial fires. This is due to accidental and human error. It is too soon in the development of the City (figures only shown for our first 2 years) to draw any conclusion as to a trend. It is important that we continue to monitor this information in subsequent years to determine whether or not there is a real increase in industrial fires or do the figures for the year 2002 represent a 'blip' on the continuum. Should there prove to be an undesirable trend in subsequent years, clearly our priorities will require increased inspection and public education programs for industrial occupancies

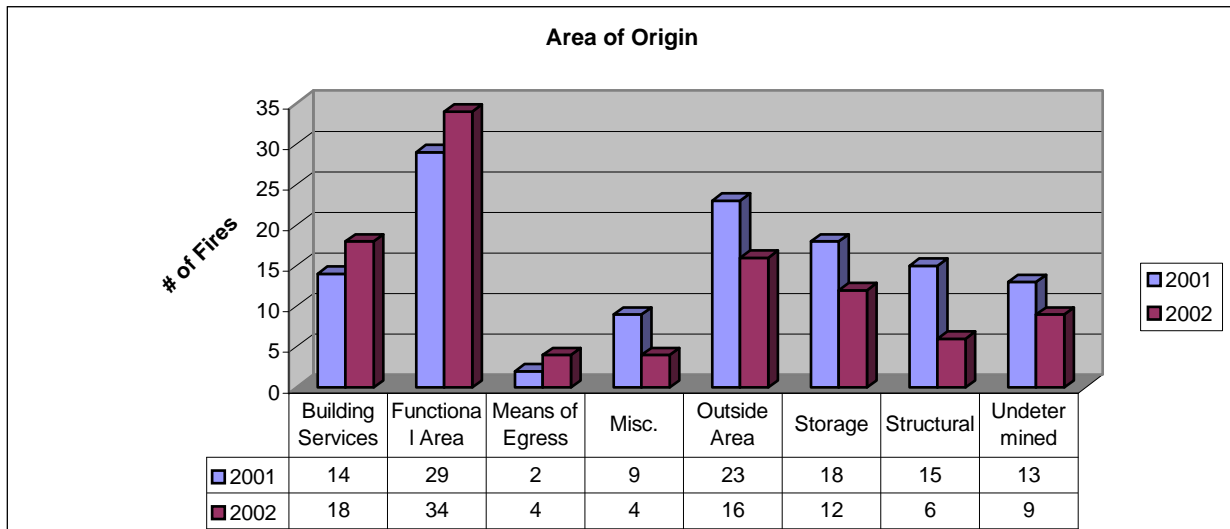
In the same manner, the overall totals for fire have dropped from 118 to 98. While this is encouraging, this figure, also, should be monitored in subsequent years for further trends.

As to possible cause of these fires, just over 75% of the total are deemed to be accidental. Only about 6% of the total are incendiary. This amounts to only 5 such fires in each of the 2 years. 30% of that total (3 of 10 fires) involves juvenile fire setters. (Source: OFM Data Services) Our TAPP-C program in effect continues to operate in partnership with CHIMO Youth and Family Services, providing the mental health component.

### Possible Cause of Fires - City of Kawartha Lakes – 2001 & 2002



Source: OFM Data Services



Source: OFM Data Services

## Municipal Fire Loss Profile Concerns

1. **Industrial Fires Increase:** The figures from the Municipal Property Dollar Loss table above indicate, at face value, a significant increase in property loss from industrial fires. As this is only the third year since amalgamation in the history of the City of Kawartha Lakes, only two total years of statistics are available. This is much too small to draw conclusions as to any apparent fire safety concerns in industrial occupancies. It is certainly within our means to consider public education programs related to these types of occupancies. And it is certainly important to monitor these figures in subsequent years.
2. **Increased Responses:** Over the first two years of the City, *overall* responses have increased in all divisions. The two areas which show significant increases are medical responses, from some 22% to 29% of total responses and motor vehicle accidents from about 11% to 16% of total responses. It should be noted that since the summer of 2002, firefighters in the Lindsay division have been responding to both these types of calls where previously they were responding on an as needed basis only. (Source: *internal figures from all division's occurrence reports*). While there are 18 full time firefighters in the City, approximately 350 firefighters respond as volunteers. Should the demands on their personal time become too great, their response may be reduced accordingly. This could impact negatively on available help should there be a sudden significant fire emergency.
3. **Tracking by Suppression Crews:** In conjunction with the re-vamping of our smoke alarm program, suppression crews will be asked to be more attentive to the presence of smoke alarms, installation of smoke alarms and battery replacement in smoke alarms within homes where they have gained entry. This information will be reported as part of the occurrence reporting in order to pass it along to fire prevention staff. All staff will also be asked to report the incidence of input/discussion on home escape plans, again this information can be passed along to fire prevention staff for tracking each month.
4. **Residential Fires:** Residential fires are the source of greatest dollar loss. This is a concern that continuously needs to be dealt with through public education. This includes school programs, visits to homes for seniors, instructional talks to church groups and any other way in which fire prevention personnel can contact the public. As the 65+ year old segment of the population is large and also forecast to grow, there is substantiation for maintaining a public education presence within the older community.

## COMPONENT 2 - PRIORITY SETTING FOR COMPLIANCE

Priority Setting Worksheet					
Fire Safety Priority	Status		Effectiveness, Goals/Objectives		
List in order of priority	Current fire prevention / public education programs that address the fire safety priority		Existing programs adequately address the fire safety priority & ensure compliance with minimum FPPA requirements?		
	If No, how would you reallocate resources and/or implement additional fire prevention or public education program / activities?				
	Fire Prevention (inspection) Activities	Public Education Activities	Y / N	Fire Prevention (Inspection) Activities	Public Education Activities
<b>1) Residential Occupancies</b>	<ul style="list-style-type: none"> <li>• home inspections</li> <li>• by request</li> </ul>	<ul style="list-style-type: none"> <li>• Risk Watch</li> <li>• Older &amp; Wiser</li> <li>• Smoke Alarm Program</li> <li>• Fair Displays</li> <li>• PSAs</li> <li>• Sparks, Cubs, Brownies</li> </ul>	Y	Home Inspections have been expanded from Lindsay to include Omemee and Bobcaygeon	Smoke Alarm Program is in the process of being re-vamped to ensure it is consistent across the City. Our presence in the community is being expanded to include more public presentations. School programs continue – to make contact with younger residents
<b>2)Seniors</b>	<ul style="list-style-type: none"> <li>• care facilities</li> <li>• long term facilities</li> <li>• public housing facilities</li> <li>• supervised fire drills</li> </ul>	<ul style="list-style-type: none"> <li>• Older &amp; Wiser – seniors safety, luncheon talks, fire drill follow-up</li> <li>• Partnership with Community Care</li> </ul>	Y	Inspections continue on an annual basis or by request. Fire drills co-ordinated with building administrators.	New initiative with Community Care to formalize arrangements, introduce extinguisher instruction, train volunteer drivers in fire safety awareness
<b>3)Seasonal Residences – cottages, trailer parks, boaters</b>	<ul style="list-style-type: none"> <li>• trailer parks</li> </ul>	<ul style="list-style-type: none"> <li>• PSA on cottage smoke alarm</li> <li>• Brochure distribution at lock stations and campground offices</li> <li>• Fair Displays</li> </ul>	Y		Continue PSAs for seasonal residents, aware of looking for new avenues for getting the message out.
<b>4)Institutional</b> • Nursing homes Hospitals	Annual accreditation & inspections	<ul style="list-style-type: none"> <li>• Fire safety &amp; extinguisher training for all staff</li> </ul>	Y		

<b>5)Assembly</b> Theatres Restaurants Convention Centres Bingo halls Community halls Church halls	Annual inspections of those identified and on file	<ul style="list-style-type: none"> <li>Posted fire  prevention  signage</li> </ul>	<b>Y</b>		Set up information kiosk
<b>6)Industry</b>  <b>Factories</b>	Annual and review of fire Inspection safety plan of those identified and on file	Fire safety training for employees and extinguisher training on request	<b>Y</b>		Encourage other factories to participate in fire extinguisher training seminars Fire safety training for employees and extinguisher training on request
<b>7)Business</b>  <b>Retail outlets</b> <b>Malls</b> <b>Down town</b> <b>Cores</b>	Inspected by request or by complaint	Brochures are left for owners and tenants	<b>N</b>	Set up a program to inspect every 2-3 years on a rotational basis OR inservice inspection program by on-duty crew	Expand this program that we could put fire prevention information kiosk in malls
<b>8)</b> <b>Farming</b> <b>community</b>	Inspections on request	Information passed on at all local fairs. Also visits for burn permits	<b>Y</b>		