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# The City of Edmonton Fire Rescue Service

## *Fire Rescue Service Review & Recommendations 2005*

***Western Division***



FIREUNDERWRITERS SURVEY  
A SERVICE TO INSURERS AND MUNICIPALITIES

*Provided by:*

**CGI Information Systems and Management Consultants Inc.**



## **EXECUTIVE SUMMARY**

**Fire Underwriters Survey** is a process operated under the auspices of the Insurance Advisory Organization and administered by CGI Insurance Business Services. Utilizing technical staff, the Survey provides data on public fire protection for fire insurance statistical work and underwriting by most of the member companies of the Insurance Bureau of Canada. It also advises municipalities on deficiencies in their fire defenses and recommends improvements to enable them to better deal with fire protection problems.

While the Survey is one of several factors used in the development of property insurance rates, particularly those applying to commercial, industrial and institutional occupancies.

### **Purpose of study**

CGI Insurance Business Service was retained by the City of Edmonton Fire Rescue Service to provide a review of the status of recommendations made in the 1999 Fire Defense Study. This review will serve as the basis for making recommendations to the current and future Fire Underwriters' Survey grading for the City of Edmonton.

This study is not a full analysis of the fire protection capabilities of the City of Edmonton. Rather, it is an update on the status of the recommendations made in the original 1999 study. This is significant, as the fire industry adopted a new standard for the provision of fire rescue services in 2002 called NFPA 1710. These standards establish the comprehensive minimum criteria to ensure safe and effective fire response by career fire departments.

### **Recommendations from this review**

1. The City of Edmonton's Public Fire Protection Classification assigned to the City of Edmonton will remain unchanged at a Class 3 grading.
2. An upgrade will occur if the City of Edmonton makes a commitment to:
  - **Increase Aerial coverage in the City of Edmonton** by moving from 8 Aerials to 11.
  - **Provide an acceptable level of Fire Public Education** in the City of Edmonton.
  - **Meet insurance industry standards for the frequency and type of Fire Inspections.**
3. Ensure that the vehicle replacement plan is continued
4. The vehicle maintenance program currently in place is maintained.
5. Significant investment in fire rescue training and training facilities are sustained.
6. Investment plan in new stations is fully implemented.

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## **Introduction:**

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### **Purpose and Objectives of the 2005 Study:**

**Fire Underwriters Survey** is a national organization administered by CGI Insurance Business Services. Utilizing technical staff, the Survey provides data on public fire protection for fire insurance statistical work and underwriting by most of the member companies of the Insurance Bureau of Canada. It also advises municipalities on deficiencies in their fire defenses and recommends improvements to enable them to better deal with fire protection problems.

Qualified surveyors conduct full field surveys of the fire defenses maintained in municipalities across Canada and the results of these surveys are used to establish the Public Fire Protection Classification (PFPC) of a community. While the Survey is used in the development of some property insurance rates, particularly those applying to commercial, industrial and institutional occupancies.

The PFPC is also used by underwriters to determine the amount of risk they are willing to assume in a given community or section of a community.

The Fire Underwriters Survey also uses PFPC information to develop the IBC Dwelling Protection Grade (DPG), which applies to single-family residences.

The overall intent of the grading systems is to provide a measure of the ability of the protective facilities of a community to prevent and control the major fires that may be expected to occur by evaluating in detail the adequacy, reliability, strength and efficiency of these protective facilities. The schedule used does not consider past fire loss records but, rather, fire potential based on the physical structure and makeup of the community.

In the application of the schedule, the fire defence conditions in a municipality are measured against a recognized standard of fire protection. The essential features of a community's fire defenses are assessed, including water supply, the fire department, fire prevention, emergency communications, building construction controls and hazards.

This study was commissioned by The City of Edmonton's Fire Rescue Service to provide the status of recommendations made in 1999 that were created to assist the City in both its short and long-term plans for municipal fire protection.

### **Purpose and Objectives of the 1999 Study:**

The 1999 Fire Department Study was commissioned by the City of Edmonton's Emergency Response Department to assist in setting forth recommendations that would assist the City in both its short and long term plans for municipal fire protection.

Key components of the 1999 Fire Department review included the following:

- A Detailed Risk Assessment of the City;

- Interviews with Staff from all Divisions;
- Evaluation of Current Policies and Practices;
- Evaluation of Current Fire Stations and Facilities; and
- Evaluation of Fire Apparatus and Equipment

In-tandem with the Fire Department review, IAO was retained in 1999, by EPCOR Water Services Inc. to examine the adequacy and reliability of the public water supplies in Edmonton which fall under their auspices.

### **Methodology for this Review:**

The question of adequate fire protection is one that encompasses a variety of interrelated factors. These include the number, type and operating methods of the fire fighting companies housed at the fire station, fire safety programs, and the availability of adequate water supplies. The most widely recognized guidelines for establishing appropriate levels of service are those developed over many years by the property insurance industry for underwriting purposes. In Canada, the Insurers' Advisory Organization (IAO) and its predecessor organizations have done much of the work in this area and have developed grading systems and published guidelines to assist communities in planning for public fire protection.

This analysis was conducted as an update on the status of the 1999 recommendations. The recommendations made in 1999 and the status of those recommendations are fully covered in this study. Since 1999 there have been a number of changes both nationally and locally that impact the provision of fire rescue services in the City of Edmonton.

In 2002 the National Fire Protection Association adopted NFPA 1710. This meant that for the first time across North America, fire services had a minimum standard to strive towards in the provision of their fire services. This standard allows communities to determine if the resources allocated for the different types of fires, emergencies, medical calls and other incidents are sufficient to effectively control the incident and protect lives and property. The City of Edmonton City Council adopted key provisions of this standard as service level targets for the department:

- Ensuring all apparatus whose primary function is fire attack, search and rescue, ventilation or aerial operations are staffed with a minimum of four firefighters.
- Ensuring that where technical hazards, high hazard occupancies, high incident frequencies or geographical restrictions occur that a minimum complement of five firefighters is provided on pumper companies.
- Ensuring that competencies are maintained through appropriate staff training.
- Establishing one minute (60 seconds) as the target for turnout time, 90 percent of the time.
- Establishing four minutes (240 seconds), or less, as the target time for the arrival of a first arriving pumper company at a fire suppression incident, 90 percent of the time.
- Establishing eight minutes (480 seconds) or less for the deployment of a full first alarm assignment at a fire suppression incident, 90 percent of the time.

Lacking in 1999 was a comprehensive plan in the City of Edmonton on how to address the deficiencies in the fire rescue service. In 2000, City Council received “*Fire Vision 2000*” as the long term plan for addressing these deficiencies. The plan addresses:

- Human Resource requirements
- Fire Chief to lead implementation
- Apparatus Replacement Program
- Computer Technology
- Station and facilities program
- An Internal Efficiency Program

Over the past eight years Edmonton has experienced robust economic growth. This growth will continue unabated as a record \$76.4 Billion worth of capital projects are planned over next decade in the Edmonton service area. In addition to the robust economic growth, Edmonton has also experienced rapid population growth. The results of the 2005 City of Edmonton Census shows that the population as of April 1, 2005 is 712,391, a 7% increase from the last federal census in 2001. The 1999 recommendations did not anticipate the scope of the growth that has occurred in Edmonton.

There has been significant intensification occurring in mature neighborhoods in the City of Edmonton. Edmonton’s downtown population has doubled over the past eight years. In addition to the additional population, there has been a considerable expansion in the development of high rise projects.

### **The Grading System:**

Using the Grading Schedule document and other relevant standards and guidelines, we assign two (2) classifications to communities with organized public fire protection. These include the Public Fire Protection Classification (PFPC) and the Dwelling Protection Grade (DPG), both of which are discussed below.

### **Public Fire Protection Classifications (PFPC):**

Using the Grading Schedule model, major features and conditions in the community including water supply, fire department, fire service communications, fire prevention and building code enforcement and conditions are evaluated. The evaluation of the fire defenses is expressed as a protection classification, which is graded on a 1 to 10 scale. The grading reflects the ability of the community to combat major fires that may be expected to occur in commercial, industrial, institutional and multi-family residential properties. Class 1 represents the highest level of public fire protection while Class 10 represents the absence of any effective public fire protection.

The four major features considered are tabled below along with their relative importance:

<b>FEATURE</b>	<b>RELATIVE WEIGHT</b>
Water Supply	30%
Fire Department	40%
Fire Safety Control	20%
Fire Service Communications	10%
<b>TOTAL</b>	<b>100%</b>

### **Water Supply:**

Under this category there are 15 sub-items each with a number of requirements. The analysis of the water supply system begins at the source and follows the water through the supply works and distribution system to the hydrants which deliver it to the fire department pumpers. The entire grading concentrates on adequacy and reliability. We examine the structural conditions in representative areas of the City and establish required fire flows. These required fire flows are amounts of water deemed necessary to confine a major fire to a building or group of buildings, and ultimately extinguish the fire. Building construction, occupancy, exposures and the provision of private fire protection such as automatic sprinklers are considered. The fire flows form the basis for the entire grading requirements.

Some of the other factors considered under the Water Supply feature include:

- Adequacy and reliability of the system as a whole and each unit or group of units that fall within it;
- Ability of the system to maintain required fire flows during periods of prolonged pump, power or main outage;
- The arrangement and adequacy of the distribution system;
- Hydrant distribution, spacing and maintenance;
- Valve spacing and maintenance;
- Provision of complete and duplicate records;
- Construction of buildings on which water supply is dependent;
- System component installation and design standards.

### **Fire Department:**

Under this category there are 19 sub-items each with a number of requirements. Overall, an analysis of the fire department's operational capability is carried out. The end result is that resources should be sufficient to effectively extinguish fires in all areas of the City. Our analysis of the fire department's fire fighting potential includes an examination of the administration, apparatus/equipment and personnel fire stations locations and response time. Apparatus requirements are all dictated by the fire potential.

Some of the other factors considered under the Fire Department feature include:

- Number of pumpers and ladder companies:



- Distribution of apparatus and fire hall locations;
- Design, maintenance and condition of apparatus;
- Personnel;
- Training programs;
- Response to alarms;
- Quantity of minor equipment, including hose, nozzles etc.;
- Extent of pre-fire planning;
- Provision of complete and duplicate records.

**Fire Service Communications:**

Under this feature, we consider all aspects of the communications system due to its direct impact on fire department response. Factors considered include:

- The communications centre;
- Means for transmitting alarms by public;
- Means of alarm dispatch and dispatching services;
- Radio communications.

**Fire Safety Control:**

Fire Safety Control forms an integral part of a community's fire defense system. The threat of fire is a community problem and everyone has a role to play when it comes to fire prevention. Recognizing the need to shift from firefighting to fire prevention, the Fire Safety Control feature was elevated to 20% of a community's grading in the last revision of the Grading Schedule.

Three broad factors when evaluating the Fire Safety Control feature: the adequacy of the laws and codes in use; the enforcement of the codes; and the actual conditions observed at the time the community is evaluated.

**Dwelling Protection Grades (DPG):**

The Dwelling Protection Grade reflects the ability of a community to fight fires in small buildings such as homes. There are 5 categories and Grade 1 is the best or highest level of protection. A class 1 indicates that the community has a strong overall water supply system and fire department, while a Grade 5 indicates that fire protection is non-existent or does not meet minimum insurance grading requirements. Basic elements of the fire defenses are considered and include the water supply, number of fire fighters responding, type of apparatus responding and provision for alarm dispatch.

At the time of the 1999 Municipal Fire Defense Study several recommendations were made with regard to the fire defenses in the City of Edmonton. This report will identify the major deficiencies only, which were mainly attributed to the City of Edmonton receiving a retrogression in the public fire protection grade and identify any areas that may still remain deficient from the 1999 study. This report will also provide recommendations that will assist the City of Edmonton in achieving a public fire protection classification 1, which is the best grade that can be achieved.





## **1999 Insurance Grading Classifications:**

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As a result of the 1999 review, the Public Fire Protection Classification assigned to the City of Edmonton has retrogressed to a Class 3 grading from its former Class 2.

The Dwelling Protection Grade assigned to Edmonton has not changed as a result of our review and continues to be a Class 1, on the scale of 1 to 5. It should be noted, however, that the City is not equally protected throughout and that areas such as Terwillegar are beyond recommended response times. These deficient areas are discussed later in this report.

**Status of the 1999 Study Recommendations:**

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**Recommendations:**

RECOMMEND	DESCRIPTION	STATUS
#1	A modern qualification based modular training program be established	Implemented
#2	A Planning and Research section is needed to collect and analyze data and put forth practical recommendations pertaining to apparatus and equipment additions and replacement; future fire station needs; staff development, growth and promotion practices; training activities; public education activities, fire prevention inspection practices etc.	Implemented
#3	A staged program should be set up to meet recommended inspection frequencies.	Not Implemented
#4	A staged program should be set-up to provide public education.	Not Implemented
#5	We recommend that the reserve investigation vehicle be equipped to the same level as the primary unit.	Implemented
#6	Training Officer be assigned to the Training Branch with direct responsibilities to train safety codes personnel.	Implemented
#7	A formal schedule be established with centralized records of all fire rescue training.	Not Implemented
#8	A formal scheduled, performance based in-service training program.	Implemented
#9	A modern training facility should be constructed as soon as possible.	Implemented
#10	It is recommended that the Facilities, Equipment and Supplies Section be located at site of the new Training Centre, thus centralizing all facilities.	Not Implemented
#11	Re-organize the Branch to greater flexibility to allow greater span of control.	Implemented
#12	Another Training Officer may be required to develop/coordinate specialized/outside training programs.	Implemented
#13	It is recommended that the Mechanical Division be reorganized and brought under the auspices of the Emergency Response Department.	Not Implemented
#14	It is recommended that the mechanics be certified as Emergency Vehicle Technicians	Not Implemented
#15	<p>The new shop should include the following:</p> <ul style="list-style-type: none"> <li>• Six (6) double deep service bays with drive through capability;</li> <li>• At least two (2) bays and preferably three (3) should be equipped with heavy duty hoists of at least 100,000 lb. capacity;</li> <li>• Bays should be served by overhead cranes of minimum 3 ton capacity;</li> <li>• Draft pit adequate for service testing fire apparatus;</li> <li>• Welding/fabrication shop;</li> <li>• One of the bays should be equipped as a wash facility to allow removal of street grime, ice, snow, etc. This is especially needed</li> </ul>	Implemented

	<p>during the winter months;</p> <ul style="list-style-type: none"> <li>• Large tool room;</li> <li>• Reference Library;</li> <li>• Office of the Chief of Apparatus;</li> <li>• Shop office;</li> <li>• Lunch/Meeting room;</li> <li>• Large parts storage area;</li> <li>• Washroom/locker room; and</li> <li>• General office for EVT's to do paperwork, etc.</li> </ul>	
#16	This mechanical services facility should be located at the recommended Training Complex.	Implemented
#17	Fire Rescue Apparatus purchased be multi-function.	Implemented
#18	The computer support personnel must be responsible to the ERCC Manager.	Not Implemented
#19	The City of Edmonton's Emergency Communication Center is located next to one of the largest EPCOR sub stations. Either the sub station be relocated or both blast and radiation protection should be provided for the ERCC.	Not Implemented
#20	It is recommended that all property division personnel be relocated to the recommended Training Complex.	Not Implemented
#21	Additional resources are required to support the Breathing Apparatus Mask Repairman. In addition, the functional role of this section should be expanded to include gas detection equipment.	Implemented
#22	A fire station should be constructed in the area of 156 <sup>th</sup> Street and 23 <sup>rd</sup> Avenue.	Implemented
#23	It is recommended that all new pumper vehicles be designed and equipped as pumper-rescues.	Implemented
#24	It is recommended that pumpers ( pumpers- rescues) operating from Stations #9, 20 and 23 be equipped with a 15 metre light aerial ladder/ elevated stream device (commonly known as a telesquirt) or three additional aerial's be purchased to provide the equivalent coverage.	Not Implemented
#25	It is recommended that all future aerial trucks in Edmonton be of the quintuple type. The two current 30 metre units should be located in Stations 2 and 6. 30 metre quintuple units should also be provided in Fire Stations 5, 7, 8, 12, 13 and 16.	Implemented
#26	The five (5) present companies be replaced by two (2) Heavy Rescue Vehicles with crews specially trained in technical rescue functions. Existing units, have been equipped to handle heavy rescue and are considered acceptable.	Implemented
#27	It is recommended that the tankers be replaced by vehicles with a water tank capacity of at least 6800 Litres (1500 Imperial gallons) and preferably 11,000 Litres (2500 Imperial gallons).	Implemented
#28	It is recommended that tankers be provided in Fire Stations 17, 18, 19, 20 and 23.	Implemented

#29	4 wheel drive units are valuable for responses to rural areas. They should be located in Fire Stations 7, 8, 12 and 16 and staffed from the aerial companies located in these halls.	Implemented
#30	It is recommended that a fully staffed Dangerous Goods Company be re-established.	Implemented
#31	A second Dangerous Goods Company should be retained	Implemented
#32	The Terwillegar Station should be provided with a pumper-rescue apparatus.	Implemented
#33	Aerials should have a qualified Acting Officer (FFQ) on staff to allow an officer on both of the two rural units.	Implemented

## **Analysis of 2005 Findings:**

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### **Grading:**

The City of Edmonton Fire Rescue Service has made significant progress on a number of recommendations made in 1999. However, as detailed below, there has not been progress on a number of key recommendations. As a result the current Public Fire Protection Classification for the City of Edmonton will remain unchanged at a Class 3 grading.

### **Inadequate Aerial Coverage:**

In Edmonton, there are currently eight aerials deployed. In 1999 the recommendation was for 11 aerials (or suitable alternatives) to be deployed. These aerials should be located at stations 2, 5, 6, 7, 8, 9, 12, 13, 14, 16, 20, and 23.

*Rationale:* As assessed in 1999 the deployment of Aerials enables the service to mount a comprehensive fire attack in a specified coverage zone. Based on the deployment model utilized in the City of Edmonton, eight aerials are not adequate to provide the coverage across the City of Edmonton.

With the establishment of NFPA 1710, the minimum acceptable fire company staffing level should be four personnel responding on each ladder company responding to any type of fire.

### **Provide an Acceptable Level of Fire Public Education:**

Fire safety education efforts are currently ineffectual and require upgrading. For a City the size of Edmonton it is crucial that the department maintain a high visibility profile in enforcement, education, training and advisory services. It is recommended that the City of Edmonton Fire Rescue Services become further committed to the Fire and Injury Prevention Educators' Network currently being developed by the Fire and Educators' Network of Alberta. This committee is comprised of all stakeholders engaged in public safety.

*Rationale:* As noted above in the major grading features 20% of the overall grade is in the Fire Prevention portion of the Fire Underwriters' Survey. A solid and consistent inspection program, high profile in public education and awareness programs, and effective enforcement have proven that communities with a planned approach have fewer injuries, fatalities and property damage due to fire.

### **Meet Industry Standards for the Frequency and Type of Fire Inspections:**

The current Fire Prevention Inspection Program is projected to be at 96% completion by the end of 2005. In order to achieve this level of inspection, the frequency of inspections has been changed and has put the City of Edmonton Fire Prevention Program further away from meeting any required level from the Fire Underwriters' Survey requirements.

Inspection of places of public assembly or egress concerns when occupied, generally evening inspections are required to be inspected semi annually. Regular inspections of severe life hazard occupancies are required at least 3 times per year, others twice per year. All other inspections should be conducted on an annual basis.

It is recommended that the City of Edmonton Fire and Rescue re-evaluate the Fire Prevention Inspection Program and provide a plan to ensure the above requirements will be met over the next five years. The City of Edmonton Fire Rescue has an excellent in-house training program (E-Learning) that is providing training for all personnel to become basic safety codes officers in the fire discipline with opportunity to advance to the next levels. It is recommended the Fire Department Administration look at utilizing these personnel to enhance the in-service inspection program.

*Rationale:* As highlighted in the section on public education, comprehensive fire inspection programs are a critical foundation for municipalities to prevent the incidences and impacts of fire.

### **Ensure that the Vehicle Replacement Plan is Continued:**

At this time there are six pieces of apparatus that are not meeting the minimum age requirements, The City, however, has adopted an apparatus replacement plan which should allow for all equipment to meet the required age acceptance within the next five to seven years.

*Rationale:* To provide a modern fire service, communities must ensure that they have fire apparatus meeting current industry standards for equipment and safety purposes. Apparatus in service that do not meet these standards become a liability both for the citizens being served and the fire fighters staffing the apparatus.

### **Vehicle Maintenance Program Currently in Place is Maintained**

At the time of the 1999 visit the City was in the process of re-locating the Mechanical Division. The recommendation was to locate the mechanical facility at the same place as the training complex. At the time of this 2005 review, the Mechanical Division had been re-located to a modern facility located adjacent to the new training complex.

The staffing of the Fire Fleet and Equipment Services has been increased since the 1999 study and is capable of maintaining the current apparatus and equipment. As the fleet increases with the addition of future fire stations, consideration will have to be given to adding additional maintenance staff.

Additional qualified staff has been hired and an Apparatus Maintenance Program is in place that meets the requirements of Fire Underwriters' Survey.

*Rationale:* Ensuring that all fire service apparatus are maintained to a high degree of reliability. This is critical to the overall performance of the service.

### **Significant Investment in Fire Rescue Training and Training Facilities are Sustained:**

The 1999 Fire Defense Study report recommended:

- A Training Officer to be assigned to the Training Branch with direct responsibility to train safety codes officers.
- A Training Officer be put in place who will be in charge of the overall coordination of the fire fighters training

- Establish a formal schedule, performance base in-service training program
- Establish a program where all in-service training records can be tracked
- Training facilities to be moved to a centralized location

The current organization chart and information indicates that the above recommendations have been met.

A tour of the training facility classrooms and training ground was conducted and found to meet all of the above recommendations. The new training ground is a state of the art facility and meets the Fire Underwriters' requirements

The City of Edmonton Fire and Rescue Services is in the process of implementing a new E-learning system which will allow administration to track all training records for in-service and specialized training courses will identify student weaknesses and strengths. Through the E-Learning Program all officers and acting officers, will receive training and certification at a basic fire safety codes level.

In addition, two non uniform personnel have been brought on staff to assist the Training Division with preparation for courses and to provide assistance with the set up of training scenarios.

*Rationale:* The science of fire fighting has evolved significantly over the past ten years. Advances in building codes and building material used has significantly changed firefighting techniques.

### **Investment Plan in New Stations is Fully Implemented:**

In the 1999 study it was highlighted that the City of Edmonton was not providing adequate coverage in the south west side of the city. This has been addressed by the building and staffing of the Terwillegar Station 24. The City is planning to build a number of new stations in response to the expansion of the city.

*Rationale:* The Fire Rescue Service uses a station based deployment model. To meet standards for response, requires the strategic placement of station across the city to meet industry response standards (NFPA 1710).

### **Other Findings**

#### **Administration**

Based on the organizational chart received it appears that the Fire Chief has no direct control over logistics, apparatus and equipment maintenance and communication. This is due mainly to the fact that the Manager of Emergency Communications and Resources reports directly to the General Manager. At this time the current reporting structure appears to be working without any major issues, however, experience dictates that this system could become dysfunctional due to a breakdown in

communications between personnel. The optimal situation would be for the Manager of Emergency Communications and Resources to report directly to the Fire Chief.

### **Emergency Communications**

Since the 1999 review there have been a number of notable changes within the Emergency Communications area. Staffing levels have been addressed to ensure appropriate coverage. A Training Officer dedicated to the on-going needs of Emergency Communications Specialists has been established. All workstations have been upgraded to the new ergonomic design with additional evaluation and dispatch workstations implemented. Plans are in place to implement an internationally recognized Fire Rescue Dispatch Protocol in 2006. Technology upgrades have been implemented to the Computer Aided Dispatch System to accommodate the use of Automated Vehicle Location. Pilot projects have also been completed on the use of mobile computing capability in front line fire apparatus with a plan to implement on first line apparatus in 2007.

### **Water Supply and Distribution System**

A tour of all newly developed areas' since the 1999 study was conducted along with random flow tests with a representative of EPCOR in attendance. All flow tests were found to be meeting Fire Underwriters' Survey minimum requirements. The distribution system is well looped and hydrant distances are generally meeting the minimum standards of 90 metres for commercial areas and 150 metres for single family residential areas. EPCOR's Hydrant and Valve Inspection and Maintenance Programs are meeting minimum standards and is well tracked and documented.

It appears that the City of Edmonton Planning and Development Departments appear to have a good working relationship with EPCOR when it comes to providing EPCOR with up to date information on new development and building design. This assists EPCOR with providing minimum standards for water supply for fire fighting.



## **Conclusion**

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The City of Edmonton Fire Rescue Service has come along way during the last four years. It is commendable that they have carried out a number of the recommendations from the 1999 Defense Study.

Unfortunately, a number of the recommendations have not yet been met and as a result, the Public Fire Protection Grade will remain at 3.

The recommendation regarding the expansion of the aerial capabilities has not been carried out, nor is there any evidence that a plan has been put in place to do so. Further, a plan to increase the number of inspections and provide a full public Fire Education Program is necessary. Fire Underwriters' Survey is prepared to re-evaluate the above area's to ensure a plan passed by Council is in place to deal with the above recommendations.

If the City of Edmonton Fire Rescue Service can provide the Fire Underwriters' Survey with a plan, adopted by Council, to purchase the required aerals within the next 4 years and a plan to increase the frequency of inspections, we would be willing to review the City's insurance grade.

Further, the City may actually achieve a Grade 1, if they are able to satisfy all of the recommendations referred to in the 1999 Fire Defense Study. It should be noted that only two cities in Canada are currently at a Public Fire Protection Class 1.