



**CITY OF HAMILTON**  
**COMMUNITY AND EMERGENCY SERVICES DEPARTMENT**  
**Hamilton Fire Department**

<b>TO:</b>	Chair and Members Emergency & Community Services Committee
<b>COMMITTEE DATE:</b>	September 12, 2016
<b>SUBJECT/REPORT NO:</b>	Fire Underwriters Survey (FUS) Insurance Grading Review (CES16042) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	David Cunliffe 905-546-3343 Shawn De Jager 905-546-2424 ext. 3378
<b>SUBMITTED BY:</b>	Joe-Anne Priel General Manager Community & Emergency Services Department
<b>SIGNATURE:</b>	

**RECOMMENDATION**

- (a) That the Fire Chief be authorized to utilize the combined Development Charges funding identified in the 2014 Background study for projects #59 and #60 (\$200,000) to fund the updating of the City's Hazard Identification and Risk Assessment relative to Fire Services and the development of a 10 year plan for the delivery of fire services in the City of Hamilton; and,
- (b) That the Fire Chief report back to Council on the findings of the updated City's Hazard Identification and Risk Assessment relative to Fire Services and the details of the 10 year plan for the delivery of fire services once it has been completed.

**EXECUTIVE SUMMARY**

In the fall of 2014, the Hamilton Fire Department was advised by the Fire Underwriters Survey (FUS) that they would be conducting an assessment of the City of Hamilton's fire defences including, but not limited to, Fire Suppression/Operations, Training, Communications, Mechanical, Fire Prevention, and Water Supply for fire insurance grading and classification purposes. FUS is a national organization that represents more than 90 percent of the private sector and casualty insurers operating in Canada. The insurers are provided with data by FUS regarding public fire protection that is used in their underwriting process.

The 2016 FUS assessment measured the capabilities of the Hamilton Fire Department in conjunction with water supply against the level of risk within the City. The resulting measurement is not usually determined by the most significant risk, but is generally the

value which is representative of the fire potential of most large properties in the municipality. This measurement allowed FUS to benchmark the level of risk present throughout the City based on fire station response districts. Once risk levels had been benchmarked, FUS then measured the capacity of the Fire Department to respond and provide loss mitigation and property protection through fire suppression. Based on the completed assessment of the City's fire defences, a numerical grading is provided for both commercial line and personal (residential) line insurers. It should be noted that the specific insurance grades (Class) by fire station location are proprietary to FUS and as such are not included in this report. The correspondence received from FUS providing a summary of the assessment and the insurance grading results is attached as Appendix A to Report CES16042.

### **Summary of FUS Assessment Findings**

- The 2016 fire insurance classification assessment indicates that the Public Fire Protection Classification (PFPC - commercial) grade in areas where fire protection is provided by fire stations having both career and volunteer firefighters co-located (composite) or just volunteer firefighters was maintained and/or was improved relative to the 2002 assessment.
- For the various City fire stations where protection is provided by full time firefighters only, the PFPC Commercial has changed from an overall Class 1 to a Class 2 or Class 3 dependent upon the fire station. In this regard, FUS has advised that there are currently no communities in the Province of Ontario which have earned or maintained a PFPC Commercial Class 1 rating. Likewise FUS has advised that there are no communities in the Province of Ontario currently with a PFPC Commercial rating of Class 2, with the exception of the Hamilton Fire Department.
- The 2016 fire insurance classification assessment indicates that the Dwelling Protection Grades (DPG – Personal Insurance Lines) for all fire stations was maintained and/or improved relative to the 2002 assessment.

In summary, the assessment completed by FUS indicated that the City performed well in most grading items under the categories of Fire Department and Water Supply. Of particular note, the Fire Department scored well as it pertained to the measurement of fire force available (firefighting resources) and the availability of apparatus to respond. However, there are two main areas, Pre-incident Planning and Fire Safety Inspections, that were identified as areas where additional grading points could be obtained in the future. This could be accomplished through increased activity and frequency of inspections.

Given that the FUS review provided limited information in terms of identifying hazard and fire risk gaps for future planning purposes, there is still a need to develop an all-

encompassing 10 year plan for the delivery of fire services in the City of Hamilton. With the significant growth/change that has occurred and is projected in the City, it is imperative that the City's Hazard Identification and Risk Assessment (HIRA) relative to Fire Services be updated as well. This process would allow for the development of a gap analysis relative to the current resources available and provide recommendations which will help to form the basis of the 10 year plan for the delivery of fire services in the City of Hamilton.

As part of the 2014-2019 Development Charges background study, two projects #59 and #60 were identified to complete station needs studies relative to growth related fire service requirements in Waterdown and Upper Stoney Creek. The combined value of both projects was identified as \$200,000. If the scope of these two projects were combined and expanded, this funding source could be used to complete the suggested 10 year plan for the delivery of fire services in the City of Hamilton.

***Alternatives for Consideration –Not Applicable***

**FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

Financial: In preparation for this report, consultation with Corporate Finance has confirmed that sufficient funding currently exists in the Fire Protection Development Charges Reserve fund to cover the \$200,000.

Staffing: There are no staffing implications associated with Report CES16042.

Legal: There are no legal implications associated with Report CES16042.

**HISTORICAL BACKGROUND**

Prior to the 2014 notification, FUS had last completed a limited assessment within the City of Hamilton in 2002, in order to realign the grades due to amalgamation. The last full review of each of the areas of fire defences was completed in 1989 for the former City of Hamilton.

There are two specific grade classifications that are used by insurers:

1. For commercial insurance lines, the PFPC is used. The PFPC grading system evaluates the ability of a community's fire protection programs to prevent and control major fires that may occur in multi-family residential, commercial, industrial, and institutional buildings. It is a numerical grading system scaled from 1 to 10. Class 1 represents the highest grading possible and Class 10 represents an unrecognized level of fire protection, or fire protection beyond 5 km by road travel distance from the nearest responding fire station.

2. For personal (residential) insurance lines, the Dwelling Protection Grade (DPG) is used. This grading reflects the ability of a community to handle fires that may occur in small buildings such as single family dwellings and semi-detached dwellings. It is a numerical grading system scaled from 1 to 5. Class 1 represents the highest grading possible and Class 5 indicates little or no fire protection is present; Class 5 also represents fire protection beyond 8 km by road travel distance from the responding fire station.

In 1989, the former City of Hamilton was provided with a blanket Public Fire Protection Classification (PFPC) commercial grade of Class 1, for areas where fire protection was provided by full time firefighters only. This grade was carried over during the realignment of grades in 2002 for the amalgamated City of Hamilton. The Dwelling Protection Grades (DPG) classifications put in place in 2002 varied based on the fire station protection areas throughout the amalgamated City and whether or not the areas were hydrant protected.

#### **POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

None

#### **RELEVANT CONSULTATION**

Not applicable

#### **ANALYSIS AND RATIONALE FOR RECOMMENDATION**

The outcome of the FUS assessment identified two main areas, Pre-incident Planning and Fire Safety Inspections relative to the PFPC (commercial grade), where increased activity levels could provide additional grading points in the future. However, the FUS review provided limited information in terms of identifying hazard and fire risk gaps for future planning purposes.

With the significant growth/change that has occurred and is projected in the City over the next several years, it is imperative that a process be undertaken to update the City's Hazard Identification and Risk Assessment (HIRA) relative to Fire Services. Using the updated HIRA, a projected version would be created incorporating the City's anticipated growth and development over the next 10 year period. This projected HIRA would then be analyzed relative to the current fire service delivery model to identify gaps.

Recommendations including time frames would then be developed to address the identified gaps in order to manage the associated risk. This planning process would also incorporate recommendations on requirements to increase activity levels in the areas of Pre-incident Planning and Fire Safety Inspections as identified in the FUS assessment.

**ALTERNATIVES FOR CONSIDERATION**

None

**ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

**Economic Prosperity and Growth**

*Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.*

**Healthy and Safe Communities**

*Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.*

**Our People and Performance**

*Hamiltonians have a high level of trust and confidence in their City government.*

**APPENDICES AND SCHEDULES ATTACHED**

Appendix A to Report CES16042: Correspondence dated July 11, 2016 received from Fire Underwriters Survey providing a summary of the assessment and the insurance grading results