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2015 OPERATING BUDGET BRIEFING NOTE

Vertical Response Times

Issue/Background:

- Vertical response time is the amount of time required to transition from the curbside of an affected high-rise property to the location of the actual emergency in a high-rise building. Vertical response time is calculated in addition to total response time.
- The National Fire Protection Association (NFPA) *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations by Career Fire Departments* (NFPA 1710-2010) is the accepted performance standard for urban fire service deployment. However, performance standards are based upon the response to single family residential structure fires. At present, there are no specific performance guidelines relating to responses in high-rise residential buildings. Toronto Fire Services (TFS) has brought this issue to the attention of the NFPA and has requested that NFPA develop high-rise specific standards. Although discussions with NFPA are ongoing, there is no specific performance target in the area of vertical response to date.
- The issue of vertical response is an issue that affects fire safety in Toronto much more significantly than it affects any other city in Ontario as a result of the proliferation of high-rise residential buildings in Toronto. Unlike most other cities, the majority of residents both live and work in the urban downtown core, as opposed to many cities where people work downtown but tend to live in suburban residential areas.
- Initial vertical response data shows that, in 2014, the range of time required for the first crew of firefighters to ascend from the curbside to the area affected by a fire in high-rise buildings is between 5 minutes and 11 seconds and 5 minutes and 53 seconds. This is time in addition to total response time.

Key Points:

- The issue of vertical response is one that poses significant challenges for TFS. The increasing development of high-rise buildings and population density in Toronto demands enhanced emergency response provisions and response considerations. Fires in high-rise buildings require significantly more firefighters in order for operations to be conducted in a safe and effective manner, as compared to low-rise structures.
- On average, 42% of all TFS emergency responses in Toronto require multiple emergency response vehicles and crews. This is increasing consistently on a year over year basis as the

City continues to intensify and as the number of multi-storey and high-rise residential buildings increases.

- The three lines of defence, as defined in the Fire Protection and Prevention Act, (Public Education, Code Enforcement and Emergency Response) are key in mitigating the challenges of vertical response times.
 - Public Education – TFS proactively educates the public on fire safety and fire prevention to enhance the public's ability to prevent and survive fires and other hazards.
 - Code Enforcement – TFS enforces the Ontario Fire Code and related fire safety standards to ensure that buildings meet the Code and are safe for residents.
 - Emergency Response – TFS continues to monitor and track vertical response times. Efforts in this area will continue with CFAI through an integrated risk model and a thorough assessment of risk (called the Standards of Cover).

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