



February 12, 2019.

Chairman Emmerson and Honourable Members of Council,

To preserve life, property and the environment, firefighters strongly adhere to the motto “every second counts.” The primary purpose of the fire and rescue service is to protect lives and property. Prompt and efficient mobilization of firefighters in response to a fire or emergency related incident is crucial in order to accomplish this core purpose and is therefore a key aspect of public safety.

Traffic congestion is a critical problem and is increasingly more so, particularly in an urban area that influences the travel time of emergency response vehicles. Factors such as existing road networks with increasing congestion are impacting the response times of VFRS.

I am writing to request that the Regional Municipality of York take the opportunity through the Transportation Services 10-year Roads and Transit Capital Construction Program budget; reconsider the prioritization of capital projects based on the concerns identified within this communication, coupled with a more fulsome discussion which may evolve the input and selection criteria for this project and/or future projects, with the hopes of advancing the noted priorities within the 10-year timeline.

The importance of emergency response is widely recognized, so much so the Provincial government enacted a requirement under the Fire Protection and Prevention Act (FPPA) O. Reg. 377/18: Public Reports, in which fire services must report response data to the Ontario Fire Marshal. Fire services are now required to report based on NFPA 1710, which defines the overall time from dispatch to scene arrival as the total response time. The NFPA 1710 standard divides total response time into several distinct segments, of which “travel time” is defined as the time interval that begins when a fire department unit is enroute to the incident and ends when the fire department unit arrives at the scene. The fire apparatus/crew has 240 seconds for a response involving fire suppression and 240 seconds for the arrival of a unit with a first responder with an automatic defibrillator or higher-level capability; and must achieve these benchmarks 90% of the time. With the legislated reporting requirements to industry standards, our focus has turned to identifying the barriers and challenges to achieving time standards and the required enhancements to the existing road network that would reduce the time it takes firefighters to travel to an incident. Traffic congestion has always been a conspicuous problem in the emergency response scenario but is becoming a crucial issue that needs immediate attention.

While the Region has sets of indicators to measure traffic congestion, and processes to capture data and report on those indicators, a key indicator in the fire service used to note the effects of traffic congestion, is travel time. This metric can be tracked to show the change and effects of traffic congestion over time (all other variables held constant). Traffic congestion can be categorized into two basic types: (1) recurring and (2) non-recurring congestion. Recurring congestion is predictable because in general it recurs at the same location on a daily basis like rush hours. Non-recurring congestion is unpredictable because it is the result of dynamic events. The non-recurring congestion disturbances are typically the result of incidents, vehicle breakdown, bad weather, work zones, and special events.

VFRS' Master Fire Plan (MFP) identifies that the road network, road type and road design impacts our response times detrimentally in nine locations (sub-communities) within the City of Vaughan. The identified locations create a response challenge for the Vaughan Fire and Rescue Service as it impacts emergency response travel times across the City. These will impact all probable scenarios in both existing and future conditions in localized areas. Three areas of concern identified in our MFP, which the Region are currently conducting an environmental assessment and a ten-year capital plan for roadway improvements include: Teston Road (Keele Street to Bathurst Street, Project 99816), Major Mackenzie Drive from Highway 400 to Jane Street including the intersection and Major Mackenzie Drive from McNaughton/Avro Road to Keele Street (Project: 81932D).

Focusing specifically on Major Mackenzie Drive from McNaughton/Avro Road to Keele Street, this is a unique and challenging corridor for response. Three out of our thirteen front run trucks along with our supporting apparatus (for depth of response) use this major corridor as a primary route for response. It is the only east/west connector road north of Rutherford Road that has no missing link unless using King Vaughan Road. Because of the existing congestion and the abundance of access points along Major Mackenzie Drive, vehicles attempting to enter or exit the various driveways are often unable to do so immediately. They must wait for gaps in opposing traffic, blocking vehicular flow and further exacerbating congestion along the study area. The road tends to be heavily congested; without a turn lane, it limits a driver's option in terms of moving out of the way for emergency response vehicles, especially when traffic is gridlocked. Providing a centre turning lane would ease congestion by removing the turning vehicles from the through lanes, as proposed.

This corridor brings traffic to Canada's Wonderland, which attracts up to 40,000 visitors each day to the park in the summer months. Now with plans to extend the facility into a year-round operation, we anticipate increased call volume along with less seasonal fluctuations in traffic patterns. Canada's Wonderland is adjacent to the first Smart Hospital in Canada, the Vaughan Mackenzie hospital. With a state of the art emergency room, and the location of the York Region District Stroke Centre, a less obstructed route for emergency access to the Vaughan Mackenzie Hospital is of utmost importance.

Furthermore, the new Vaughan Mackenzie hospital will translate to more than 1,800 full-time staff positions, and approximately 700 volunteers with operations 24 hours per day 7 days a week. This will presumably lead to a further surge in vehicles travelling this roadway, often during times that the roadway is at maximum capacity. Already our firefighters have a difficult time maneuvering through roads that appear to be at capacity during rush hour and we anticipate the challenges to worsen with intensification.

While the rationale to explore congestion and mitigation measures are numerous, the following are two concrete examples. Using records from 307 fires in nonresidential buildings over a three-year period, investigators in the United Kingdom correspondingly found response time to have a significant impact on final fire area (Sardqvist 2000). The concern for response time also comes from the goal of emergency medical services; which is saving lives and limiting the impact of disease and/or injury. Many conditions require quick, aggressive medical treatment, both in the field (at the incident) and at hospital. For example, the care provided during cardiac arrests and strokes include field assessments and interventions that are time critical and potentially improve a patient's chances of returning to a normal lifestyle.

Communities, workplaces and businesses all need to know that when they call the fire and rescue service, they will get a rapid response – whenever they need it. As we grow, the City becomes harder and harder to protect. We look forward to continuing the conversation with the Region and relevant stakeholders to help identify emerging strategies to mitigate traffic congestion and related response challenges. It is acknowledged that traffic congestion is not a challenge that we can eradicate from our municipality; however, projects such as the three identified (two on Major Mackenzie and one on Teston Road) will assist with the urban fire response dilemmas in the future. Through planning, analysis, and the sharing of information, together we can alleviate some of our challenges.

Pride & Honour.



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