

Appendix B: Implemented Initiatives to address operational challenges

TFS has implemented many initiatives in recent years to improve performance and commit to continuous improvement. The aim of these initiatives is to improve both service delivery and performance for Toronto residents. Steps taken include changes to TFS processes, new equipment designs, projects with partner divisions and resources to support staff. These recent initiatives cover all aspects of the service TFS delivers to attempt to influence different areas in a positive way.

Turnout time improvements

To attempt to positively influence turnout time a number of initiatives have been implemented over the past few years.

- *Station Design:* To work towards a positive impact on turnout time performance from the physical distance elements, TFS actively considers the effect of station layout on turnout time when designing any new fire station.
- *Pre-alerting system and Performance Management:* A pre-alerting system has been implemented in all stations as of November 2020. This system provides a few extra seconds of notification while the call is still being processed. TFS is working on incremental change to alter behaviours where the standard is not met, to work its way towards the goal. Turnout times that were outside of the target are automatically flagged and performance management measures are implemented. It is being monitored with an evaluation at the one-year mark to see its overall impact.

Travel time improvements

Travel time has the most external variables to consider. Elements such as time of day can impact travel time as it will determine how many other vehicles are on the road. If there is a blocked lane, or major construction, the captain may need to quickly find an alternative route to their destination for the driver.

TFS has a few ongoing initiatives to positively influence travel time.

- *Familiarity runs:* One of the main ways that TFS staff work to mitigate issues to travel time is through driving familiarity. Route familiarity reduces driving errors, improves wayfinding, and situational awareness of road conditions within Toronto neighbourhoods. Crews will drive through their run district to ensure they are familiar with the changes that may be occurring, for example, a long term lane or street closure for construction. It allows the crews to identify new routes ahead of an emergency that might occur in the area so that they know how they can plan around the closure. Additionally, TFS is notified of major closures so that crews are prepared in advance for alternative routes.
- *Traffic Pre-emption:* TFS has been in conversation with Transportation Services on Traffic Pre-emption. Emergency Vehicle Pre-emption (EVP) involves the timing of traffic lights so that they can assist emergency vehicles and the travel time on their way to emergencies. It involves an integration of the City's Traffic Management Centre with emergency vehicles GPS systems. As well as having potential positive

safety impacts for first responders, it is also estimated to result in positive potential impacts to travel time. This project remains ongoing and TFS will continue to be an active participant.

Mental Health Resources

TFS operational firefighters are faced with stressful situations daily. In some cases exposure to traumatic events may lead to staff needing to take time off in order to seek support. In 2016, the Ontario Government passed Supporting Ontario's First Responders Act (Post-traumatic Stress Disorder), 2016. This legislation created the presumption that Post-traumatic Stress Disorder (PTSD), diagnosed in first responders, is work related. TFS understands the importance of protecting and supporting the mental health of staff and has taken steps to support staff at all stages.

TFS has implemented supports to prevent occupational stress injuries including PTSD. This includes Road to Mental Readiness (R2MR) resiliency training, policy changes to minimize secondary exposures, facilitated quarterly support group, meetings to create social connection and minimize isolation for employees with an Occupational Stress Injury and the addition of a part time Employee Assistance Counselor to the TFS support team in conjunction with Corporate Employee Health and Rehabilitation.

Since 2017, TFS has worked to implement the R2MR training program for all staff. There are four modules for this training, and TFS continues to develop in house abilities to deliver the training. To date, TFS has in house abilities for three of the four modules, with 2,156 staff having received at least one module. TFS is currently working through modules 2 and 3 with its 3,000 staff and plans for module 4 are underway.

In order to provide a broad-based approach to supporting the mental health of staff, TFS has resources in place to integrate resiliency for Occupational Stress Injuries (OSI) alongside other initiatives. The approach adopted strives to assist staff who require assistance find the quickest path to wellness. The programming recognizes a number of pillars are required to provide a fulsome support program for TFS staff throughout their careers. This includes; proactive resiliency training for staff to help recognize when they, or their colleagues may need someone to reach out to, operational policies to protect staff from secondary exposures, a peer support team of trained firefighters who volunteer their time supporting staff after a traumatic incident and can bridge any staff who are struggling to community supports, four Chaplains who are available for staff seeking spiritual support, and a part-time employee assistance counselor who provides short term counselling and referrals to external resources.

Assessing Resource Distribution across the City- New stations

TFS emergency response operates out of 83 Stations located strategically across the City. Optimal location of operational resources takes into consideration population density, service volumes and drive times. TFS monitors first-in crew response (TRT) and first in-effective firefighting (EFF) response time performances to identify and respond to opportunities to improve; resulting with potentially relocating existing stations and/or recommending new fire stations. Using predictive analysis tools, TFS assesses the response time impact when recommending the addition and/or relocation of stations. This tells TFS whether the change would potentially have a net positive or negative impact to overall performance.

TFS works collaboratively with CreateTO to identify new potential locations, either to rebuild existing stations or for new stations. As a station can take upwards of ten years from decision to build once the funding is available, the sooner the need for a station can be identified the better so the process can begin. TFS has one new station currently under construction at Downsview Park-Station 144 which is nearing completion and will be in service in early 2022. Additionally, TFS identified the need for two additional new stations in the 2021 10-year Capital budget as a result of increasing service demand with population growth and increasing densification: Lower Don Lands and Humber Bay Shores. TFS is also in the exploratory phase with CreateTO to identify a potential location for a station in the Thorncliffe neighbourhood.

After Action Reports

In July 2020, TFS implemented a formal After Action Report (AAR) process. This process reviews significant emergency incidents to identify and document lessons learned and opportunities for continuous improvement. The process aims to answer the following questions:

- Is TFS providing the appropriate training?
- Is TFS providing the required equipment?
- Is TFS deploying the correct resources to mitigate the incident?
- Are TFS Standard operating Guidelines, Training Notes, Equipment Notes and Policies maintaining currency with industry best practices?

As of August 2021, TFS has completed 10 AAR's providing recommendations to frontline staff and other divisions to improve service delivery and public/firefighter safety.

65mm hose transition

In 2020, TFS transitioned from a 38mm to a 65mm hose for high-rise firefighting; increasing the water flow to firefighters in high-rise firefight situations. This upgrade aligns TFS processes with industry best practice within NFPA 1710. By increasing the diameter of the hose line it increases the flow of water firefighters are able to access and allows for faster fire extinguishing. Given the increasing volume of high-rise buildings in Toronto, this transition is helping mitigate some of the challenges that accompany fighting fires in high-rises.

Diagnostic and Predictive Analytics

In a city that continues to increase both in population density and vertical buildings, TFS is responsible to correspondingly maintain service levels and industry best practices. TFS has done a lot of work to analyze optimal location of crews in relation to service demand, community risk and an equity lens. Predictive analytics is used to evaluate potential impacts of crew relocations and identify areas of the city that may require a new station. The TFS Analytics and Decision Support Division is constantly reviewing and analyzing response metrics; informing the Operations division of emerging issues and the corresponding root cause. This work is supporting a data driven decision-making culture.