TORONTO

STAFF REPORT
ACTION REQUIRED

Master Fire Plan Update

Date:	September 2, 2015
To:	Community Development and Recreation Committee
From:	Fire Chief and General Manager, Fire Services
Wards:	All
Reference Number:	p:\2015\ClusterB\FIR\cd150023

SUMMARY

This report responds to City Council's request for the Fire Chief and General Manager, Fire Services to report to the Community Development and Recreation Committee with updated information related to components of the Toronto Fire Services (TFS) 2015-2019 Master Fire Plan including vertical response time, proactive fire prevention and education programs, technology improvements, and the TFS diversity employment strategy.

The issue of vertical response continues to be a priority for TFS because of the proliferation of high-rise buildings in the City of Toronto. TFS continues to monitor the impact on emergency response times to appropriately inform future resource deployment strategies. TFS is also working to keep high-rise training content up-to-date and relevant.

In 2015 and 2016, Fire Prevention staff will continue to be deployed for proactive risk mitigation initiatives including inspections of vulnerable occupancies, expanding the Pre-Planning and Familiarization Program, and increasing the number of inspections of high-rise buildings. Both prevention and public education programs will be prioritized to address areas of greatest risk and complexity.

TFS is in the process of implementing a number of critical technological changes that are expected to yield improvements in efficiency and service levels. These include dynamic staging and predictive modelling technologies which will help with the assessment of the overall placement of fire stations and apparatus.

Through improved outreach, recruitment and hiring practices TFS has demonstrated a strong commitment to equity hiring and a diverse workforce. TFS continues to assess and improve these processes.

RECOMMENDATIONS

The Fire Chief and General Manager, Fire Services, recommends that:

1. The Community Development and Recreation Committee receive this report for information.

Financial Impact

There are no financial implications resulting from the adoption of this report.

Any financial implications associated with the implementation of the Master Fire Plan and other changes that may be implemented as highlighted in this report will be considered either through separate reporting to the Standing Committee, or considered as part of future-year Capital and Operating Budget processes.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting on March 31, April 1 and 2, 2015, City Council adopted the Toronto Fire Services (TFS) 2015 – 2019 Master Fire Plan. City Council requested the Fire Chief and General Manager, Fire Services provide the Community Development and Recreation Committee an update regarding various topics including: vertical response time; proactive fire prevention and education programs; technology improvements; the TFS 2015-2019 diversity employment strategy; and assessment of the overall placement of fire stations and apparatus.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.CD2.1

ISSUE BACKGROUND

The Master Fire Plan provides strategic direction for TFS and outlines the critical initiatives that TFS will implement over the next five years in order to achieve its objectives. TFS' strategic directions are: keep communities safe, empower staff, strengthen partnerships and improve performance.

The Master Fire Plan aligns with TFS' ongoing efforts to improve fire and life safety outcomes for all residents across the city through education and prevention activities and the provision of high quality, efficient, and effective emergency response. This is supported by the Office of the Ontario Fire Marshal's "three lines of defence" for the delivery of fire protection services in Ontario – education, prevention and suppression.

The Master Fire Plan also addresses a number of major issues which form the basis of the work to be carried out over the five year term of the plan, including strategies related to the service priorities of vertical growth and diversity.

COMMENTS

Vertical Response Time

Vertical Response Time is an issue with a more significant impact on fire safety in Toronto than any other Ontario municipality. Vertical Response Time is the measurement of the additional time required for firefighters to get to the location of the emergency incident within a building, after arriving "curbside" at a municipal address. The City of Toronto has had a proliferation of high-rise buildings; and the Vertical Response Time of firefighters will continue to be a priority into the future as the majority of proposed residential development within Toronto is in the form of mid-rise and high-rise apartment buildings.

Development of Vertical Response Time Standards

The National Fire Protection Association *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations by Career Fire Departments* (NFPA 1710) is the current accepted industry performance standard. NFPA 1710 establishes the following performance standards for incident response:

Table 1: National Fire Protection Association (NFPA) 1710-2010 Standards

Segment	Elapsed Time Target	Performance Standard	Acceptable Risk Factor (variance)
Emergency Call Processing Time	60 seconds	90% of the time	10%
Turnout Time	80 seconds	90% of the time	10%
Travel Time – First Responding Apparatus	240 seconds	90% of the time	10%
Total Response Time - First Responding Apparatus (first truck on scene)	6 minutes 20 seconds	90% of the time	10%
Total Response Time – Effective Firefighting Force (all necessary crews on scene to effectively manage incident)	10 minutes 20 seconds	90% of the time	10%

The standard for Total Response Time is 6 minutes and 20 seconds, which measures response time to the street-level of the municipal address and does not speak to the time taken to arrive at the exact site of an emergency in a high-rise building.

The current and historic standards contain no performance targets for vertical response; however, response standards for low-rise and high-rise residential buildings are being developed and reviewed by the NFPA. These are presented in Table 2 below. In 2013, TFS began an initiative, in advance of the NFPA standards being updated, to track and improve vertical response. In 2015 to date, TFS' Vertical Response Time (i.e. time taken for firefighters to first ascend to the site of the emergency) ranges between 5 minutes and 12 seconds and 5 minutes and 34 seconds.

While the proposed standards, set out in Table 2, do not address the time it takes to get from the curbside to the site of the emergency, they make reference to the response time to get to the scene and the number of firefighters required at the scene to ensure an Effective Firefighting Force has been achieved (all necessary crews on scene to effectively manage incident).

Table 2: Proposed NFPA Standards for High-Rise and Low-Rise Residential Buildings

New NFPA-1710 Standard Under Review	Definition	Total Complement Required	Total Time
Low-Rise Residential	1,200ft^2 apartment within a three-storey, garden-style apartment building	27/28	10 minutes & 20 seconds
High-Rise Residential	7 or more storey buildings	43	12 minutes & 30 seconds

Once the standards are adopted, TFS can use them as a benchmark to measure vertical response time performance for getting an Effective Firefighting Force on scene. The standard can also be used to inform staff deployment strategies to ensure an appropriate complement is on scene for low/high-rise incidents as required.

Vertical Response Impact

The increase in the number of high-rise developments in the City of Toronto and the impact this has on response times necessitates an assessment of the overall placement of stations and firefighting apparatus (trucks). Two critical strategies will help to facilitate this type of assessment:

The Accreditation Process

TFS will evaluate fire station location effectiveness and apparatus staffing complement relative to the population density in high-rise areas and planned growth areas of the city. This includes evaluating resource deployment strategies based on the risks and needs in the different areas of the city, which will be completed through the Commission on Fire Accreditation International (CFAI) accreditation process. Through CFAI, the *Standards of Cover* will be identified to appropriately match resource requirements to the specific level of risk across all areas of the city.

Implementation of New Technologies

TFS is in the process of implementing a number of critical technological changes that are expected to yield improvements in efficiency and service levels by altering the way in which resources are utilized. This includes a predictive modelling tool that will consider the type of incidents, the realities of congestion and vertical issues, and assist in ensuring operational resources are positioned across the city in the most optimal locations.

High-Rise Training

Firefighters have been receiving high-rise training and education since 2003. TFS continually evaluates the ability to respond to any emergency and regularly reviews firefighter knowledge levels including the use and knowledge of equipment. Training content and materials are updated on an as-needed basis. Increasing high-rise development across the city however has highlighted the need for continued education and training specific to vertical response.

For example, each high-rise building is unique in construction and engineering including a wide range of backup water systems. Given that timely or accurate information can be difficult to obtain during an emergency incident, TFS proactively collects data on building construction type, standpipe information and other information so that firefighters are able to respond effectively. A Residential/Commercial Risk-Based Awareness Program was developed to enhance knowledge of residential and commercial buildings to ensure no obstacles would prevent a timely and effective fire response.

A Pre-Planning and Familiarization Program (PPFP) was also recently developed for staff to gather information prior to an emergency providing firefighters with an opportunity to become familiar with the layout of buildings and property, including the type of safety systems, location of shutoffs, controls, response points, and any hazardous materials. This PPFP is different from the Risk-Based Awareness Program which deals with potential hazards that require routine inspections to ensure compliance with the Ontario *Fire Code.* The information collected and documented through both programs is used to inform the high-rise training curriculum.

Proactive Fire Prevention, Inspection and Education

Several recent reviews of TFS recommended increased staffing in the Fire Prevention and Public Education division to bolster activities in this area. This is supported by the Office of the Ontario Fire Marshal's "three lines of defence" for the delivery of fire protection services in Ontario – education, prevention and suppression. Through the 2013 Operating Budget process, TFS added 15 new Fire Prevention and Public Education staff. At its December 16, 2013 meeting, City Council adopted the *Results of the Fire Insurance Grades Study* report endorsing a risk-based inspection program and pre-fire planning across the city.

An additional 25 staff were requested and approved in each of the 2014 and 2015 Operating Budgets representing a significant investment in both fire prevention and public education initiatives. As well, a new organizational structure has been implemented to allow increased attention to both prevention and education activities. The division of responsibilities will allow concentrated oversight and the development of performance measures to track success.

Table 3 outlines the 65 additional Fire Prevention and Public Education staff deployed in the 2013, 2014, and 2015 budget and the dates they commenced Prevention, Inspection and Public Education work.

Table 3: Deployment of Additional Public Education and Fire Prevention Staff

Year	Total # of Staff Deployed*	Public Education Staff*	Prevention/ Inspection Staff	Training Commenced	In Field
2013	15	0	15	March 25, 2013	July 8, 2013
2014	25	5	20	September 15, 2014	December 22, 2014
2015	25	5	20	September 14, 2015	December 7, 2015

*Due to the Collective Agreement provisions, some of the positions may be classified as supervisory positions such as Captains and District Chiefs.

New staff have largely been used to implement the Risk-Based Awareness Program, the Pre-Planning and Familiarization Program (PPFP), and the new vulnerable occupancy inspection requirements mandated through amendments to the Ontario *Fire Code.* As of January 1, 2014, Ontario Regulation 150/13 amended the Ontario *Fire Code* to enhance the fire safety of occupants in care occupancies, hospital/care and treatment occupancies, and retirement homes. New requirements include an annual mandatory fire drill to ensure all duties under the approved safety plan are carried out and a mandatory Inspection Checklist to ensure fire protection systems are up to date.

The additional staff in Fire Prevention and Public Education also provides an opportunity to begin proactive routine inspections in conjunction with the current complaints-based approach. Further, with the hiring of new staff in 2014, two new Inspection offices were created in the west and south areas of the City. In 2015, 15 new inspectors will form three new offices in the south area of the City and will focus on proactive inspections of high-rise buildings and high density areas.

Fire Prevention Initiatives in 2013 and 2014

During the last six months of 2013, new Fire Prevention Inspectors focused on a backlog of required inspection work to reduce fire risk. Fire risk criteria included hoarding related issues in row housing and in low-rise and high-rise buildings, as well as follow-up on fire safety concerns in buildings identified through complaints, the Risk-Based Awareness Program or the PPFP.

TFS has adopted a "task-force" approach to a number of issues including inspection of student residences and rooming houses in areas surrounding educational institutions and enhanced inspection and education in vulnerable occupancies.

Risk-Based Awareness Program

The Risk-Based Awareness Program was developed to enhance knowledge of residential and commercial buildings and ensure there are no obstacles preventing a timely and effective fire response. This program was implemented in the last six months of 2013 and was a precursor to the PPFP as recommended in the report by the Fire Underwriters

Survey (FUS), *City of Toronto – Improving Fire Insurance Grades Survey – 2013,* adopted by City Council.

Pre-Planning and Familiarization Program (PPFP)
In 2014, a PPFP was developed as a partnership between the Fire Prevention and Operations Divisions. Staff work closely with building owners and/or management to gather information prior to an emergency considering that timely, accurate information can be difficult to obtain during an emergency incident. Pre-planning also provides an opportunity to get familiar with the layout of buildings and property, including the type of life safety systems, location of shutoffs, controls, response points, and any hazardous materials. There are approximately eight inspection staff across the city working on the PPFP.

Increasing Safety for Vulnerable Residents
In 2014, 270 vulnerable occupancies were inspected and, as indicated in the 2013 Fire Underwriters Survey, 4,260 hours were allocated for these inspections. An additional 2,200 hours will be allocated to meet the requirement for annual evacuation drills.

Improving Inspections

In 2014, iPads were rolled out to all Fire Prevention inspectors to allow for more efficient inspection reporting. Data is collected on-site and is uploaded in real-time, eliminating delays and ultimately enhancing fire safety in buildings and homes for the residents of Toronto. iPads are also used by Senior Officers as a communication, information sharing, and command resource tool.

Fire Prevention Initiatives in 2015 and 2016
TFS will deploy Fire Prevention Inspection staff for the following proactive risk mitigation initiatives that will take place in 2015 and 2016:

Increasing Safety for Vulnerable Residents
Inspections of Vulnerable Occupancies is an annual requirement which will include witnessed and timed fire drills and a mandatory Inspection Checklist to ensure fire protection systems are up to date. This program will be expanded to inspect Rooming Houses/Group homes which may be housing vulnerable individuals and require inspections.

Pre-Planning and Familiarization Program (PPFP)
The PPFP will be expanded to mitigate fire risk in the City by identifying potentially challenging and hazardous facilities located in each command and an emergency response will be "pre-planned" to increase safety for firefighters and residents.

Complaints-Based Investigations
Staff will follow-up on fire hazards that are reported by the public and other officials. This practice is ongoing and imperative to reduce the risk of potential hazardous conditions. Resources must be reallocated when risk is identified and needs to be mitigated, for example in Multi-Residential Apartment Buildings (MRAB) that have

reoccurring problems. Other programs such as a Hydro Vault Inspection program operate with Inspection and Hydro staff checking on hydro vaults one day per week.

High-Rise Prevention Initiative
There will be increased inspections of high-rise buildings identified as having on-going problems and target inspections for areas identified through high emergency call volume for Toronto Community Housing Corporation (TCHC) buildings.

Performance Measurement
Electronic tools are being developed, using recently upgraded software, as part of the 2016 Operating Budget, to keep track of performance measures using a consistent and automated approach.

Proactive Inspections
Due to the number of buildings and structures in the City of Toronto, it is not possible to conduct proactive inspections of all buildings. As such, TFS prioritizes inspections for more complex and higher-risk buildings. Table 4, which was informed by the 2013 FUS report, includes the occupancies that will be prioritized to support this risk-based approach. The occupancy types that are highlighted in Table 4 will be prioritized for inspection in 2015 and 2016. Those not highlighted will be conducted over time. The suggested frequency of inspections is also highlighted for each occupancy type and these will be used as performance goals for Fire Prevention staff.

Table 4: TFS Goals for Proactive Inspection in 2015 and 2016

Occupancy	Total Number of Occupancies	Hours for Initial Inspection	Total Hours	Re-Inspection Goal
Assembly Occupancies (General, >150 licensed and >300)	5,597	1	5,597	Annual
Assembly Occupancies (>150)	737	2	1,474	Annual
Assembly Occupancies	353	3.5	1,236	Annual
Night Clubs	100	2	200	Every 2 Years
Elementary Schools	806	3	2,418	Annual
High Schools	205	4	820	Annual
Daycares	900	3	2,700	Annual
Hospitals	40	80	3,200	Every 2 years
Rooming Houses / Group Homes	1,718	2	3,436	Annual
Residential Mid-Rise (up to and including 6 storeys)	4,257	2	8,514	Every 2 years
Residential High-Rise (higher than 6 storeys)	3,720	4	14,880	Every 2 years

Occupancy	Total Number of Occupancies	Hours for Initial Inspection	Total Hours	Re-Inspection Goal
Hotel, High-rise	100	5	500	Annual
Hotel, Mid-rise	33	4	132	Annual
Business and Mercantile	20,784	1	20,784	Every 3 years
High Hazard Industrial Occupancies	2,775	4	11,100	Annual
Medium Hazard Industrial Occupancies	7,919	3	23,757	Every 2 years
Low Hazard Industrial Occupancies	964	2	1,928	Every 3 years

Multi-Residential Apartment Buildings (MRAB)

In 2008, the MRAB Property Standards Enforcement Program was launched with the goal of improving the rental housing stock in Toronto. The program includes pro-active inspections of common areas in apartment buildings. Residents can also bring forward concerns regarding their in-suites on the day of the inspection.

Improvements have been made to the program since 2008. Today the MRAB program goals include: prioritize the enforcement of violations that pose the greatest risk to the safety and health of tenants; increase compliance with property standards by-laws; generate greater awareness about property standards and the enforcement process among tenants and landlords; and ensure minimum property standards are maintained over time.

TFS works with the Municipal Licensing and Standards Division (MLS) and inspects properties where MLS identifies potential fire safety risks. Since 2009, TFS Fire Prevention staff have inspected 783 buildings listed in the MRAB directory. Of the 783 buildings, 487 were noted by TFS as having violations. 145 files were referred to internal Fire Prevention Legal Services staff for prosecution and 111 ultimately received fines.

TFS will continue to work with MLS and other Divisions to respond to problematic buildings. It is critical that TFS continues to inspect these types of buildings to mitigate violations that impact the immediate life safety of building occupants.

Public Education Initiatives

With the addition of newly created Public Educator positions in 2014 and 2015, the total number of Public Education staff (Public Educators) has increased to 29. Due to staff retirements, transfers, promotions (to Fire Prevention Division) and long term illness to date, this increase in staff to full complement has not been realized. Full complement is expected to be reached at the conclusion of the current Fire Prevention and Public Education Recruit Class in December 2015. Moving forward, once the Public Education Division is at full complement, the new staff will be utilized to deliver existing and new education initiatives to the public.

Prevention and education programs will be targeted to areas of greatest risk identified through enhanced research and the use of fire risk management tools. Public Education staff will continue to work closely with the Toronto Community Housing Corporation (TCHC) on the development of programs geared to priority neighbourhoods, and will develop targeted programs for areas identified through high emergency call volumes. The identification of priority areas and the development of educational programs are anticipated to involve both Toronto Police and Toronto Paramedic Services to ensure coordinated efforts.

TFS will also be conducting a community fire analysis to determine the areas of highest risk and determine any trends in Toronto's fire problem. Based on this analysis public education programs will be developed and a strategy implemented with public education staff delivering the programs to those identified cluster areas or Neighbourhood Improvement Areas (NIAs) in order to reach those at highest risk and to have the greatest impact.

Other Public Education initiatives include:

Learn Not to Burn (LNTB)
TFS will be hosting the launch of the new NFPA developed Learn Not to Burn curriculum resource. The first phase of the LNTB initiative will target Pre-School, Senior Kindergarten, and Grade One students. TFS Public Educators will be working closely with the Toronto District School Board (TDSB) and the Toronto Catholic District School Board (TCDSB), schools and teachers to implement the curriculum. Public Educators will be conducting train-the-trainer workshops for teachers, conducting presentations in the classroom to support the lessons taught, and engaging with the parents and community to reinforce what the children are learning in the schools.

Fire Safety for Older Adults and Seniors
TFS will be piloting the *Remembering When* program, a fire and falls prevention program. This will be done in partnership with Circle of Care, a community agency providing support services to seniors, including home visits. The focus of the program is on group presentations and home visits. In 2016, TFS will be expanding this program to include community agencies that work with seniors throughout the city. TFS Public Education staff will be working with the agencies closely and conducting fire and falls safety presentations and assisting with home visit inspections and smoke and carbon monoxide alarm installations.

Newcomers to Canada
TFS Public Education staff will play a more proactive role in delivering fire and life safety programs to English as a Second Language students (including adults) in the community. TFS will be working closely with the TDSB and TCDSB Language Instruction for Newcomers to Canada (LINC) programs to reach increased number of newcomers to Canada.

Technology Improvements

TFS is in the process of implementing a number of critical technological changes that are expected to yield improvements in efficiency and service levels by altering the way in which resources are utilized. These include fire station alerting, traffic signal pre-emption, mobile responder, dynamic staging, and predictive modelling. Each is described below.

Fire Station Alerting

Fire Station Alerting (FSA) is a standardized voice dispatching system that transmits automated alerts and dispatch information directly to the fire stations. It is expected that automated FSA systems can help to reduce total response times by reducing call processing times. TFS has just implemented a new FSA system and performance is being monitored.

Traffic Signal Pre-emption with Live Interactive GPS

Traffic Signal Pre-emption with Live Interactive GPS allows the normal operation of traffic lights to be pre-empted to improve emergency vehicle road response times and enhance traffic safety at intersections. TFS is currently implementing GPS signal enhancements at fire stations in order to align with the Transportation Division's Congestion Management Plan. The project ensures that GPS information is always available for TFS vehicles with no delays in acquiring signals when trucks leave the stations. Implementation of the GPS project will be completed before the end of 2015. It is anticipated that a pilot project will be conducted with Transportation Services in 2016 for identifying the best traffic pre-emption technology for TFS vehicles.

Mobile Responder

Mobile Responder will allow TFS responders to access Computer Aided Dispatch (CAD) information on smartphones and tablets. Mobile Responder allows personnel to view incident details, send and receive messages, update their status, and access databases. It provides operations staff with geospatial information for all activity in their response area, and gives dispatchers real-time location of operations staff in the field. Outcomes of using this technology include improvements in communication, safety, and efficiency. TFS will be launching a pilot for Mobile Responder in September 2015.

Dynamic Staging

Dynamic staging software uses current information from Computer Aided Dispatch (CAD) systems supported by historical emergency response data to determine the most strategic and efficient placement of trucks in real-time. This reduces service coverage gaps that can occur when multiple trucks are engaged in responding to emergency incidents. TFS completed implementation of the software in August 2015. Staff training and orientation is expected to be completed in September 2015 and a launch date is scheduled for October 2015.

Predictive Modelling

Predictive modelling will assist in ensuring operational resources are positioned across the city in the most optimal locations. The information supporting predictive modelling is

derived from both actual (past performance) data and forward looking data, including the incorporation of municipal planning information such as projected growth, types of future development, and predictable densification. An important element of predictive modelling is the incorporation of city wide, all-hazards risk assessment information, both current and projected, to inform the potential future volumes, locations, and types of emergency calls. TFS has completed data-set validation, a major component of the predictive modelling project. A pilot version of the software is currently being tested along with an iPad application. It is anticipated that implementation of all program components will be completed by the end of September 2015.

Status of Station 346
As described above, the implementation of predictive modeling will assist with identifying optimal locations of stations and apparatus. A specific area that this tool could help to inform is the area surrounding Station 346.

Station 346, located at Exhibition Place was built in 1912. The station was in need of major restoration and work was completed in 2012. TFS examined the opportunity to locate a full-time crew at this location. However, TFS determined that the location was not an optimal site for a fire station due to concerns with response times and egress from the location (as a result of congestion which increases during large-scale events hosted at Exhibition Place) and the ongoing construction on the Dufferin Street Bridge. The station is now a full-time Fire Prevention office and the location operates seasonally as a response station during the Canadian National Exhibition in the late summer.

Exhibition Place and the surrounding area are currently served by Stations 346 (seasonally), 334, and 331. Additional crews from other stations also respond to this area as required based on the incident type and severity.

Response times are regularly reviewed. As well, TFS is looking at critical development areas across the city to understand current and future risk levels including the Downtown West area. As stated in the Master Fire Plan, TFS will conduct an annual review of the strategic placement of fire stations, fire apparatus, and staff levels (using tools such as predictive modelling) to reflect the city's anticipated growth and development. TFS will also be conducting a city-wide risk assessment called *Standards of Cover*, as part of the accreditation process. The risk assessment will form the basis for goals associated with response times and on-scene resource allocations and will drive objectives related to fire station location, as well as staffing levels and other critical deployment needs.

With significant growth and development occurring in nearby areas such as Liberty Village, TFS will specifically be assessing the viability of moving one of the two pumper trucks currently housed at Station 426 (140 Lansdowne Avenue) to a new nearby location.

TFS Diversity and Employment Strategy

Improved recruitment and outreach practices help to attract a workforce that reflects the social demographic diversity of the City. Through the *Path to Diversity* report adopted by City Council in July 2013 and through recent recruitment initiatives, TFS has demonstrated a strong commitment to equity hiring and a diverse workforce.

TFS diversity initiatives and employment strategies in support of the objectives outlined in the Master Fire Plan are ongoing. TFS anticipates an annual status report on diversity initiatives to the Community Development and Recreation Committee which will include:

- Changes and improvements to the diversity and employment strategies and related processes
- Key performance indicators related to outreach initiatives
- Annual hiring and recruitment goals
- Partnership opportunities with educational institutions and other City Divisions

The first annual report related to diversity initiatives and employment strategies will be tabled in the second quarter of 2016.

The following provides an update on TFS diversity initiatives and employment strategies in support of the objectives outlined in the Master Fire Plan:

Organizational Changes

In May 2015, the Recruitment and Outreach portfolio was moved to the Public Education Division. With access to Public Educators, TFS has a greater capacity for outreach across the City. As well, in July 2015, working in partnership with the City's Human Resources Division, TFS created a permanent human resources position to provide ongoing support at all points of the recruitment and hiring process. Staff in this area provide input into outreach, recruitment and hiring practices, identify areas for improvement and ensure integrity of the processes. Current practices are being reviewed and updated accordingly.

Recruit Education and Training Requirements

At its meeting on March 23, 2015, the Community Development and Recreation Committee requested information regarding the education and training required for employment with TFS. Specifically, Committee requested a review of changes to the requirements in recent years, an analysis of the cost to potential candidates to meet the requirements, and the extent to which the costs present a barrier to achieving greater diversity in the fire service. This section provides a response to the request made by Committee.

The current recruit education and training model is a cost effective service delivery model, similar to the model that has been in place in Ontario with police services for many years. The model reduces training time and associated costs to ensure new recruits

are deployed to trucks across the city as fast as possible. A brief history and description of the current model is described below.

Up until recently, TFS managed a two-stream recruitment process. The "general stream" candidates required minimal qualifications to be considered for employment and received approximately 16 weeks of training delivered by TFS staff. "Enhanced stream" candidates met the minimum requirements and met all other requirements including completion of the one year pre-service college program, medical fit testing, licence requirements and had completed a General Firefighter Knowledge written exam. This group received nine weeks of City of Toronto specific training delivered by TFS staff.

Training for general stream recruits followed the Office of the Fire Marshal and Emergency Management's (OFMEM) Recruit Training Curriculum. In 2014, the OFMEM discontinued the curriculum and adopted the internationally recognized curriculum of the National Fire Protection Association (NFPA), which identifies the minimum job performance requirements for firefighters.

In November 2013, City Council adopted the Auditor General's Report, *Toronto Fire Services – Improving the Administration and Effectiveness of Firefighting Training and Recruitment.* The report recommended that TFS eliminate the two-stream process and implement minimum recruitment requirements, namely a college pre-service firefighter education and training program certificate. Based on this recommendation, TFS moved to a system which requires all candidates to have pre-service qualifications prior to hiring.

TFS recognized that the costs of the pre-service firefighter courses and the commitment to full time studies without the certainty of securing employment, could pose barriers for potential applicants. Further, even though candidates have graduated from pre-service courses, there was no guarantee of employment with TFS until aptitude and medical testing was successfully completed.

As a result, TFS implemented a new candidate selection process whereby candidates are now able to apply for employment with TFS without the pre-service requirement and, provided they meet and maintain current standards and job requirements, candidates are given a conditional job offer contingent on their successful completion of the pre-service curriculum at a college of their choice. The TFS Firefighter Career Access Program implemented in 2014, provides candidates with information related to the application process, course costs and options, testing requirements, and the requirements related to a conditional job offer with TFS. Candidates who successfully complete all components of the conditional job offer are eligible to receive the final job offer with a class date to begin TFS Operations Firefighter Recruit training. This training, which is approximately nine weeks in duration, is designed specifically to teach recruits about TFS practice and the unique needs of the City of Toronto.

Pre-Service Firefighter Education and Training courses offered by community colleges across Canada and the United States vary in cost and duration. Costs can range from $5,300 USD to $19,000 CAD and courses may be full time or part time and a

combination of online training coupled with hands on training. In many cases, students who require financial assistance may apply for loans and grants through the Ontario Student Assistance Program (OSAP). TFS has also partnered with the Fire Services Credit Union to allow for student loans for candidates with a conditional job offer.

Also in 2014, the Ontario Association of Fire Chiefs (OAFC) designed and implemented standardized testing for applicants. This program allows applicants to secure credentials with a one-time application and testing fee. This program also identifies suitable candidates for a career in the fire services before they enroll in the college courses.

Through focussed outreach, recruitment and candidate selection processes, TFS continues to work towards increasing the number of recruits belonging to ethnic or gender backgrounds which are under-represented in TFS relative to the social demographic diversity of the City of Toronto. Table 5 highlights the success of the new candidate selection process and that within one recruitment campaign, the percentage of recruits from under-represented populations increased by 8.5%.

Table 5: Results of Recruit Campaigns

Recruit Campaign	Total Candidate Pool	# of Candidates from Under-represented Populations	% of Candidates from Under-represented Populations	Total Recruits Hired	# of Recruits from Under-represented Populations	% of Recruits from Under-represented Populations
2012	427	65	15%	164	27	16.5%
2014*	762	187	25%	120	30	25%

*As of August 2015, three recruit classes have been derived from this pool. An additional class is expected to commence in October 2015.

Finally, TFS is currently working with Centennial College and the Toronto Employment and Social Services Division (TESS) to create new initiatives, which combined with financial support and assistance, will increase access to employment.

TFS Recruit Training

TFS current recruit courses are approximately nine weeks in duration as all recruits come into the course having already graduated from college with an NFPA compliant Pre-Service Firefighter Education and Training certificate. This is an efficient and cost effective training delivery model and aligns with the TFS diversity and employment strategy and initiatives such as the TFS Firefighter Career Access Program.

In order for TFS to offer NFPA compliant Pre-Service Firefighter Education and Training similar to program already offered by community colleges, it is estimated that the

timeline for training would increase from the current nine weeks to an additional 20 weeks or more. Costs associated with the implementation and delivery of this course would depend upon class size and the number of personnel required. Based on a class size of 40 and six instructors, training costs associated with the delivery of 20 weeks of training are estimated to be $320,000 per class. With the additional City of Toronto specific training, the entire training course would be 29 weeks in duration with an estimated cost of $464,000. It is anticipated that reverting to this training delivery model would present significant costs to TFS and delay the time new recruits are deployed to trucks and in service.

Numerous other considerations for the delivery of this type of training include:

- mandatory NFPA certification for training personnel who teach the NFPA curriculum;
- provisions in the Collective Agreement related to the transfer and placement of TFS personnel in the Professional Development and Training Division;
- the impact of this degree of training on the delivery of operational firefighter and mandatory training if training personnel are extensively involved in delivering Pre-Service Firefighter Education and Training;
- the time and cost investment of TFS personnel providing training to candidates who may not successfully complete the program and fail to graduate;
- the possibility that some candidates may receive offers of employment from other fire services once they have graduated; and,
- the requirement of third party testing to oversee the skills testing of each candidate.

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