



**For Information**

## **Annual Review of TTC's Safety, Health & Environment (SH&E) Management System**

**Date:** June 23, 2022

**To:** TTC Board

### **Summary**

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At its meeting on June 9, 2022, the TTC Audit and Risk Management Committee considered a report entitled Annual Review of TTC's Safety, Health & Environment (SH&E) Management System and received a staff presentation on the item.

The staff presentation can be viewed online:

[Q4 2020 to Q3 2021 SH&E Management System Review](#)

The subject report is forwarded to the TTC Board for information.

### **Contact**

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### **Attachments**

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Attachment 1 – Annual Review of TTC's Safety, Health & Environment (SH&E) Management System



## **Annual Review of TTC's Safety, Health & Environment (SH&E) Management System**

**Date:** June 9, 2022  
**To:** Audit and Risk Management Committee  
**From:** Chief Safety Officer (Acting)

### **Summary**

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The TTC continues to manage and mitigate occupational health and safety, operational safety as well as environmental risks due to its operations, activities and services in a systematic manner through the implementation and maintenance of its Safety, Health & Environment (SH&E) Management System.

A SH&E Management System is a comprehensive and proactive approach to managing SH&E risk. The system goes beyond a simple sum of individual or isolated safety and environmental management programs and activities, such as investigation, inspection or training. It is designed to improve SH&E performance and reduce risk by integrating all its processes into a continuous improvement cycle of Plan-Do-Check-Act.

A review of the TTC's SH&E Management System is conducted by the TTC's internal Safety, Security and Environment Executive (SX) Committee on an annual basis. The purpose of the annual review is to evaluate the suitability, adequacy and effectiveness of the SH&E Management System, ensuring the ongoing management of SH&E risk.

The current review assessed the TTC's SH&E performance between Q4 2020 and Q3 2021. The review was completed through analysis of the following inputs: performance indicators; impact of the COVID-19 pandemic; status of key SH&E projects and initiatives; audit and investigation findings; and regulatory oversight. The interim report was reviewed by the SX Committee in March 2022.

This report summarizes the full report of the annual review, which was approved by the SX Committee in April 2022. It includes the TTC's corporate level SH&E goals and objectives for 2022 to 2024.

## **Recommendations**

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It is recommended that the Audit and Risk Management Committee:

1. Approve the approach to continuously improving the effectiveness of the TTC's Safety, Health & Environment Management System, identifying priority safety, health and environment issues, and developing the TTC's safety, health and environment goals and objectives as described in this report.
2. Forward this report to the TTC Board for information.

## **Financial Summary**

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Approval of the recommendations in this report do not result in any financial implications beyond the funding included in the 2022 Operating Budget, as approved by the TTC Board on December 20, 2021 and City Council on February 17, 2022.

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

## **Equity/Accessibility Matters**

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A cornerstone of the TTC's Corporate Plan 2018-2022 is accessibility, and as a proud leader in providing accessible public transit in the city of Toronto, we are committed to ensuring reliable, safe and inclusive transit services for all our customers. This is supported by the TTC's SH&E Management System.

An effective and robust SH&E Management System is essential to the protection of communities, customers and employees who are disproportionately affected by safety, health and environmental systemic barriers. This may include Black, Indigenous and various racialized communities, people with disabilities, gender diverse communities (2SLGBTQ+) and other groups experiencing safety, health and environmental disparities.

## **Decision History**

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The TTC Audit and Risk Management Committee determined at its meeting on June 3, 2019 that this review would be presented annually to the Audit and Risk Management Committee and the TTC Board to provide members with information on the functioning of the TTC's SH&E Management System, which will help them fulfil their legislative duties as directors of a corporation, as set out in Item 7 at:

## Issue Background

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The TTC's SH&E Management System is built on the TTC's commitment to protect the environment and the safety and health of its workers, customers and the general public. The SX Committee meets annually to review the SH&E Management System, to ensure its continuing suitability, adequacy and effectiveness. This review evaluates how well the SH&E Management System is functioning in supporting the safety and security cornerstone of the TTC's Corporate Plan.

Under safety and environmental legislation, TTC Board members are considered directors of a corporation and have prescribed duties to take all reasonable care to ensure that the TTC complies with safety and environmental legislation and all regulatory orders. As such, they should be aware of the TTC's SH&E Management System and its performance.

## Comments

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The information listed below summarizes the results from the analysis of the following inputs during the annual review process:

- Performance indicators;
- Impact of the COVID-19 pandemic;
- Status of key SH&E projects and initiatives;
- Audit and investigation findings; and
- Regulatory oversight.

## SH&E Performance Indicators

The analysis of performance indicators is performed over a five-year period (October 2, 2016 to October 2, 2021) and a two-year period (October 6, 2019 to October 2, 2021) to present both the long-term and short-term movement of the data and highlight any significant trends. The table below highlights the performance indicators where **adverse trends** were observed:

Performance Indicator	Identified Trends
<b>Occupational Health and Safety</b>	<ul style="list-style-type: none"><li>• Over the five-year period, a statistically significant upward trend is observed in the lost time injury rate (LTIR). The upward trend in the LTIR is being driven by an upward trend in emotional</li></ul>

Performance Indicator	Identified Trends
	<p>trauma injuries. Emotional trauma injuries result from <b>Acute Emotional Event (AEE), Assault, Threat</b> and <b>Collision</b> injury events.</p> <ul style="list-style-type: none"> <li>• <b>AEE</b> and <b>Assault</b> injury events represent the second and fourth highest injury event types and are contributing towards the upward trend in emotional trauma injuries.</li> <li>• The TTC has developed specific objectives to address these trends, including the following projects and initiatives: <ul style="list-style-type: none"> <li>○ Establishing a suicide prevention program and action plan;</li> <li>○ Initiating a psychological health and safety project; and</li> <li>○ Establishing an assault prevention action plan.</li> </ul> </li> <li>• Working groups are in place to track and monitor progress of the action plans.</li> </ul>
<p><b>Customer and Public Health and Safety</b></p>	<ul style="list-style-type: none"> <li>• The pandemic continued to impact TTC ridership, which impacted customer injury rates.</li> <li>• Over the five-year period, there is enough evidence to support a statistically significant upward trend in the bus, subway station-related and subway vehicle-related customer injury rates.</li> <li>• Over the two-year period, there is enough evidence to support a statistically significant upward trend in the subway station-related customer injury rate.</li> <li>• Over the five-year period, there is enough evidence to support a statistically significant upward trend in the suicide attempts (including fatalities) rate.</li> <li>• The TTC has implemented projects and initiatives to address the increase in customer injuries, including: <ul style="list-style-type: none"> <li>○ Safety messaging (e.g. slips, trips and falls social media campaigns);</li> <li>○ Establishing a suicide prevention program and action plan;</li> <li>○ Studying the feasibility of retrofitting existing stations with platform edge doors (PEDs); and</li> <li>○ Training improvements (e.g. suicide awareness).</li> </ul> </li> </ul>

Performance Indicator	Identified Trends
<b>Environment</b>	<ul style="list-style-type: none"> <li>• Over the five-year period, there is enough evidence to support a statistically significant downward trend in the hazardous waste compliance. However, there is an upward trend over the two-year period due to improvements in communication, training and signage, as well as the consolidated hazardous waste contract.</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• Over the five-year period, there is enough evidence to support a statistically significant upward trend in crimes against customers, crimes against employees and unauthorized at track level (UAT). Moreover, a statistically significant upward trend is observed in assaults (excludes sexual assaults) over the same period.</li> <li>• Over the two-year period, there is enough evidence to support a statistically significant upward trend in crimes against employees and UAT.</li> <li>• The TTC has implemented projects and initiatives to address the increase in security incidents, including: <ul style="list-style-type: none"> <li>○ Establishing an assault prevention action plan; and</li> <li>○ Frontline and community support.</li> </ul> </li> </ul>
<b>Fire Safety</b>	<ul style="list-style-type: none"> <li>• There is a year-over-year decrease in the fire protection system maintenance scores. This is due to an issue receiving reports for Electrical Substations, which was resolved. The scores for Plant Maintenance remained above 98% for the year.</li> </ul>

**SH&E Projects and Initiatives**

The COVID-19 pandemic increased demand on available resources and impacted the implementation timelines of SH&E projects and initiatives. Throughout the pandemic, the TTC continued to implement control measures to protect the health and safety of its employees, customers and the public. The table below summarizes key developments towards the TTC’s corporate level SH&E goals and objectives during the review period, with a focus on projects that have a significant impact across the organization:

Project and/or Initiative	Key Developments
<b>Occupational Health and Safety</b>	
SH&E Management System Software (Safety Connect)	<ul style="list-style-type: none"> <li>The Safety Connect software went live in Q3 2020. Onboarding is being conducted in stages for incident reporting, investigation and corrective action tracking.</li> <li>Five departments have been onboarded into Safety Connect. The onboarding process has started for the Operations Group, with a target of Q3 2022.</li> <li>The configuration of additional modules is underway, with a target of Q2 2023.</li> </ul>
Management of Occupational Health and Safety Hazards and Risks	<ul style="list-style-type: none"> <li>Hazard Identification and Risk Assessment (HIRA) and Job Safety Analysis (JSA) procedures are currently being implemented in a phased approach.</li> <li>Once implemented, each department will have at a minimum, a departmental HIRA supplemented with JSAs.</li> </ul>
Psychological Health and Safety (PH&S)	<ul style="list-style-type: none"> <li>The goal is to create a PH&amp;S Management System in accordance with CSA Z1003.</li> <li>The project team is conducting an organizational review that assesses 13 psychosocial factors to identify and assess risks.</li> <li>A report will be compiled with recommendations to reduce barriers and improve engagement as well as strategies to foster a healthy and safe culture.</li> </ul>
Operational Rules Oversight	<ul style="list-style-type: none"> <li>The Operational Rules Executive (ORX) Committee continues to approve new Rules and Rules Variances.</li> <li>In 2021, the first Subway Yard Rule Book (YRB) was approved.</li> <li>Next steps include the creation of Rule Book Oversight Groups that will work with Rules Working Groups on major updates.</li> </ul>
Fitness for Duty	<ul style="list-style-type: none"> <li>In the three years prior to the pandemic, there was a decline in random testing non-compliance.</li> <li>In 2020, there was a slight increase during the first and second waves of the pandemic. In 2021, there was a much larger impact, with non-compliance increasing during the third and fourth waves.</li> <li>The random testing selection rate was temporarily reduced during the pandemic. The TTC will be gradually increasing the random selection rate back to 20%. There will also be updates to</li> </ul>

	the Specified Management position criteria on the Position Assessment Form.
Security	<ul style="list-style-type: none"> <li>• A 10-point action plan was developed to address increasing trends in offences against employees. The plan was endorsed by the SX Committee in December 2021.</li> <li>• The TTC has several established programs and recent initiatives to prevent assaults and provide support.</li> <li>• The TTC also participates in weekly Furthering Our Community by Uniting Services (FOCUS) Tables that aim to reduce risk, harm, crime, victimization and improve community resiliency and well-being.</li> </ul>
<b>Customer and Public Health and Safety</b>	
Suicide Prevention Program	<ul style="list-style-type: none"> <li>• The primary tactic is to increase the number of employees with the knowledge and skills to recognize individuals in crisis and connect them to help and support.</li> <li>• The Operations Training Centre provided in-class awareness training from LivingWorks to 220 TTC employees since 2020. E-learning was piloted amongst 386 frontline staff in Q1 2021.</li> <li>• The PEDs study has been finalized and next steps are to be determined.</li> </ul>
Traffic Safety	<ul style="list-style-type: none"> <li>• The Traffic Safety Committee (TSC) consists of Department Heads and other members directly involved in surface transportation operations and maintenance.</li> <li>• An update on the key activities and accomplishments of the TSC was presented to the SX Committee in July 2021.</li> <li>• The <i>Corporate Program – Traffic Safety</i> was approved by the SX Committee in August 2021.</li> </ul>
Naloxone Program	<ul style="list-style-type: none"> <li>• In November 2020, the TTC determined it would continue the program with Special Constables. Expansion of the program to other customer-facing groups is under review.</li> <li>• A corporate program has been drafted outlining the roles and responsibilities surrounding the administration, use and oversight of naloxone, with a target date of Q4 2022.</li> </ul>
<b>Occupational Hygiene and Environment</b>	
Subway Air Quality	<ul style="list-style-type: none"> <li>• Health Canada, in collaboration with the University of Toronto and the National Research Council of Canada, conducted the <i>Subway Air Quality Initiative</i> from 2018 to 2020.</li> </ul>



	<ul style="list-style-type: none"> <li>• The TTC is committed to monitoring levels of fine particulate matter (PM<sub>2.5</sub>) and evaluating mitigation strategies, in addition to pursuing ways to improve overall air quality throughout the system. This includes: <ul style="list-style-type: none"> <li>○ Retrofitting existing work cars;</li> <li>○ Upgrading filters on the older T1 revenue fleet;</li> <li>○ Procurement of cleaner hybrid buses and electric buses;</li> <li>○ Possibly conducting further transit air quality research; and</li> <li>○ Piloting COVID-19-related air cleaning and filtration technologies.</li> </ul> </li> </ul>
Radon Study	<ul style="list-style-type: none"> <li>• A company-wide radon study was initiated in 2020.</li> <li>• Phase 1 (substations) and Phase 2 (yards) have been completed. Radon concentrations were below Health Canada's action level in all areas measured.</li> <li>• Phase 3 (surface properties), Phase 4 (subway) and Phase 5 (follow-up) are to be scheduled over the next several years.</li> </ul>
Ergonomics	<ul style="list-style-type: none"> <li>• A corporate program was developed and resources for general instruction, awareness and self-assessments are available.</li> <li>• Specific training modules for high-risk groups were developed, but have been deferred due to the pandemic.</li> </ul>
Waste Management	<ul style="list-style-type: none"> <li>• The TTC-wide consolidated hazardous waste contract was completed and awarded in Q4 2020. As of Q4 2021, the contract is completely in effect with more than 50 cost centres on board.</li> <li>• Training has been provided, storage units, including signage/labelling are in place and a tracking and auditing process has been implemented.</li> </ul>
Spills Program	<ul style="list-style-type: none"> <li>• Site-specific Spill Contingency Plans have been completed for all operating facilities.</li> </ul>
Idling Control	<ul style="list-style-type: none"> <li>• Implementation is expected to be completed by Q2 2022.</li> </ul>
<b>Fire and Life Safety</b>	
Fire and Life Safety	<ul style="list-style-type: none"> <li>• Fire code audits, fire drills, fire safety plans, Toronto Fire Services training and data point alignment are completed.</li> <li>• Fire access routes have been designed and approved at all properties except Wilson Yard.</li> </ul>

<b>Emergency Management and Business Continuity</b>	
Emergency Management and Business Continuity	<ul style="list-style-type: none"> <li>• Operation functions were evaluated and improved through simulation exercises. Exercises focused on Automatic Train Control (ATC) and One-Person Train Operation (OPTO) processes.</li> <li>• Assistance was provided to various corporate groups with the development of business continuity strategies focused on the loss of critical staff.</li> <li>• The Business Continuity team is expected to expand throughout 2022.</li> </ul>

**Audits and Investigations**

A number of audits and other safety assurance activities are conducted to examine different aspects of the SH&E Management System. Based on the findings, corrective actions are established and tracked on an ongoing basis.

Safety Assurance Checks focusing on COVID-19 control measures continued to take place to monitor compliance with physical distancing, vehicle disinfection and bus barrier and mask use. The findings are summarized and provided to the TTC Executive as part of the weekly COVID-19 dashboard.

As part of track level safety efforts, the Safety and Environment Department continued conducting track level safety observations during night shift operations to monitor work zone compliance.

In addition, the status of environmental audits, including waste management and storage tank system audits, is monitored to ensure corrective actions are tracked to completion.

**Regulatory Oversight**

The table below summarizes and compares the number of events and documents issued that involved interactions with regulatory agencies between Q4 2019 to Q3 2020 and Q4 2020 to Q3 2021. This includes interactions with the Ministry of Labour, Training and Skills Development (MLTSD), Ministry of Environment, Conservation and Parks (MECP), Technical Standards and Safety Authority (TSSA) and City of Toronto.

The increase in events and documents issued for Safety Complaints and Section 52 Notices were primarily related to COVID-19 concerns and occupational illness. All orders issued to the TTC have been complied with and are considered to be closed.

Type of Event/Documents Issued	Number (Q4 2019 to Q3 2020)	Number (Q4 2020 to Q3 2021)
<b>Occupational Health and Safety</b>		
MLTSD Orders	11	17
Regulatory Agency Interaction Reports (RAIR) Issued	133 interactions	256 interactions
Work Refusals	21	25
Safety Complaints	18	32
Section 51 Notices (Critical Injury or Fatality)	24	22
Section 52 and 53 Notices (Injury/Illness or Accident)	12	62
Other (e.g. Inspection/Investigation, Witness Statement, Call to MLTSD)	2	6
<b>Environment</b>		
TSSA Inspections and Orders	0	1
City of Toronto Notices of Violation	1	0
MECP Inspections and Orders	0	0

**TTC SH&E Goals and Objectives**

The TTC will continue to focus on existing corporate-level SH&E goals and objectives and dedicate resources to advancing these items to completion in the assigned timeframe. The TTC’s corporate-level SH&E goals and objectives for 2022 to 2024 are attached to this report as Attachment 1.

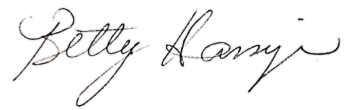
**Contact**

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## Signature

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Betty Hasserjian  
Chief Safety Officer (Acting)

## Attachments

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Attachment 1 – 2022 to 2024 SH&E Goals and Objectives

## ATTACHMENT 1 – 2022 TO 2024 TTC SH&E GOALS AND OBJECTIVES

The attachment outlines the TTC’s corporate-level SH&E goals and objectives for 2022 to 2024.

The Group/Department level effort is categorized as follows:

Category	Percentage of Effort	Description of Effort
1	0 to 25	Safety and Environment to formalize or evaluate existing processes with minimal involvement required from Groups and Departments.
2	25 to 50	Development and/or implementation of a program with some existing processes and minor to moderate gaps. Group/Department effort required will vary by applicability of the program.
3	50 to 75	Development and/or implementation of a program with minimal existing processes and moderate to major gaps. Group/Department effort required will vary by applicability of the program.

The goals and objectives have been classified according to expected timeframe for completion, e.g. short-term, mid-term or long-term. The categories are as follows:

Category	Target Date
Short-Term	Six months (Q2 2022)
Mid-Term	Six months – one-and-a-half years (Q3 2022 – Q2 2023)
Long-Term	One-and-a-half – three years (Q3 2023 – Q4 2024)
Completed	N/A

**Goal 1: Continue to strengthen and improve the effectiveness of the SH&E Management System (standards and foundational programs)**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Corporate Standard – PPE</b> (implement)	Safety and Environment	All	1	Short-term
<b>LRT Operations</b> (incorporate into SHEMS)	Safety and Environment	LRT	1	
<b>Emergency Management / Business Continuity</b> (develop framework and organizational design)	Safety and Environment	All	2	
<b>Naloxone Program</b> (develop, implement)	Safety and Environment	Special Constable Service	2	Mid-term
		Revenue Protection		
		Operations		
<b>SH&amp;E Software Phase 1</b> (implement incident reporting, investigation and corrective action tracking modules)	Safety and Environment	All	3	
<b>SH&amp;E Software Phase 2</b> (implement additional modules)	Safety and Environment	All	3	
<b>Hazard Identification and Risk Assessment Procedure</b> (implement)	Safety and Environment	All	3	
<b>Job Safety Analysis Procedure</b> (develop, implement)	Safety and Environment	All	3	
<b>Procurement Corrective Action Plan</b> (establish, track)	Safety and Environment	Materials Management	2	

**Goal 2: Reduce the frequency of lost time injuries at the TTC**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Employee Assault Prevention Action Plan</b> (develop, implement)	Operations	All	2	Short-term
	People			
	Strategy and Customer Experience			
	Safety and Environment			
<b>Psychological Health and Safety Program</b> (assess, develop report)	Safety and Environment	All	2	Mid-term
<b>Musculoskeletal Disorder Prevention (Ergonomics) Program</b> (implement)	Safety and Environment	All	3	

**Goal 3: Systematically manage occupational safety hazards with serious injury potential**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Fatigue Management</b> (assess, develop report)	Safety and Environment	Operations	1	Mid-term
		Vehicles		
		Infrastructure and Engineering (I&E)		
		Special Constable Service		
		Revenue Protection		
<b>Electrical Safety Program</b> (gap analysis, develop, implement)	Safety and Environment	Operations	3	Mid-term
		I&E		
		Vehicles		
		Engineering, Construction and Expansion (ECE)		
<b>Machine Guarding Assessment</b> (conduct, implement)	Safety and Environment	Operations	3	Mid-term
		I&E		
		Vehicles		
		ECE		
<b>Safe Operation of Powered Lift Trucks</b> (implement)	Safety and Environment	Operations	2	Mid-term
		Vehicles		
		I&E		
		Materials Management		
		ECE		



Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Hazardous Energy Control/Lockout Tagout Program</b> (implement)	Safety and Environment	Operations	3	Long-term
		Vehicles		
		I&E		
		Materials Management		
		Operations Training Centre (OTC)		
		ECE		
<b>Active Fall Protection Program</b> (implement)	Safety and Environment	Operations	2	
		I&E		
		Vehicles		
		Materials Management		
		ECE		

**Goal 4: Update existing SH&E processes to ensure compliance with legislation and best practice**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Subway Air Quality</b> (evaluate mitigation strategies)	Safety and Environment	Operations	1	Mid-term
		ECE		
<b>Designated Substances Control Program</b> (develop)	Safety and Environment	All	2	
<b>Radon Study</b> (conduct study, implement action plans)	Safety and Environment	All	1	Long-term

**Goal 5: Manage business to ensure compliance with all applicable environmental laws and regulations**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Waste Management Program</b> (implement)	Safety and Environment	Operations	3	Short-term
		Materials Management		
		OTC		
		Vehicles		
		I&E		
		ECE		
<b>Subsurface Contaminant Management Program</b> (implement)	Safety and Environment	Operations	1	Short-term
		Vehicles		
		I&E		
		ECE		
<b>Idling Control Procedure</b> (implement)	Safety and Environment	Operations	1	Short-term
		Vehicles		
		I&E		
		ECE		
<b>Environmental Awareness Training</b> (develop, implement)	Safety and Environment	All	1	Mid-term
	Human Resources			
<b>Storage Tank Program</b> (develop, implement)	Safety and Environment	Operations	1	Mid-term
		Vehicles		
		I&E		
		ECE		
<b>Chemical Management Program</b> (develop, implement)	Safety and Environment	Operations	1	Mid-term
		Vehicles		
		I&E		
		ECE		

**Goal 6: Continue to improve and strengthen Traffic Safety**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Driver Safety Assist Systems</b> (evaluate and pilot)	Vehicle Programs	Operations	2	Mid-term
		Maintenance		
		Safety and Environment		
		ITS		
		Project Development and Planning		
<b>Operator Risk Management Program</b> (develop and implement)	Operations	Safety and Environment	2	
		OTC		

**Goal 7: Continue to improve and strengthen Track Level Safety**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Rule Book Oversight Groups</b> (develop)	Safety and Environment	All	1	Short-term
<b>Streetcar and Overhead Rule Books</b> (update and issue)	Streetcar Transportation Streetcar Infrastructure	I&E	2	Mid-term
		Vehicles		
		Operations		
		OTC		
		Safety and Environment		
		ECE		
<b>ATC Process Review</b> (identify, implement opportunities for improvement)	ECE	Safety and Environment	2	
		I&E		
		Operations		
<b>APTA Subway Yard Safety Peer Review Recommendations</b> (implement action plan)	I&E	I&E	2	
		Vehicles		
		Operations		
		OTC		
		Safety and Environment		
		ECE		
<b>Subway/SRT Rule Book</b> (update and issue)	Safety and Environment	I&E	2	
		Vehicles		
		Operations		

		OTC		
		Safety and Environment		
		ECE		

**Goal 8: Continue to improve and strengthen Fire and Life Safety**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Fire Equipment Management Software</b> (implement and integrate)	Safety and Environment	N/A	1	Short-term
<b>Fire Safety Program</b> (update)	Safety and Environment	All	1	
<b>Subway System Track Level Fire Survey and Inventory</b> (conduct and document)	Safety and Environment	Plant Maintenance	1	Mid-term
		Subway Infrastructure		

**Goal 9: Ensure SH&E Management System is functioning effectively**

Objective	Lead Department	Involved Groups / Departments	Group / Department Effort	Target Date
<b>Facility Compliance Audits</b> (conduct, address deficiencies)	Safety and Environment	Operations	2	Mid-term
		I&E		
		Vehicles		
<b>SH&amp;E Audit Schedule</b> (develop, implement)	Safety and Environment	All	2	
<b>Identify Bona Fide Requirements and Review Job Descriptions</b> (review, revise)	Talent Management	Safety and Environment	2	Long-term
	OTC			



**Completed SH&E Programs, Projects and Initiatives**

Objectives	
<b>Safety and Environment Department Communications</b> (create, implement strategy and plan)	<b>Link SH&amp;E information and support with emerging technology</b> (include SH&E in MyTTC   SAP Jam)
<b>Traffic Safety Program</b> (develop)	<b>Fire Access Routes</b> (determine and establish)
<b>External Third-Party Review of Emergency Management and Business Continuity Structure</b> (review, receive report)	<b>Fire Safety Plans</b> (obtain TFS approval for surface properties)
<b>External Third-Party Review of SHEMS</b> (conduct, receive report)	

## ***Programs for Future Development and Implementation***

<b>Objectives</b>	
<b>Hazard and Near Miss Reporting Initiative</b> (develop, incorporate)	<b>Emergency Medical Responses Standard</b> (develop, implement)
<b>Safe Work Planning</b> (develop, implement)	<b>Automatic External Defibrillator Program</b> (develop, implement)
<b>Real-Time Hazard Assessment Procedure</b> (develop, implement)	<b>Leading Indicator Metrics</b> (propose, incorporate)
<b>Contractor SH&amp;E Management Standard</b> (develop)	<b>Utilities Management Program</b> (develop, implement)
<b>Service and Supply Contractor SH&amp;E Management Program</b> (develop, implement)	<b>Safe Operation of Overhead Cranes and Hoists Program</b> (develop, implement)
<b>Construction SH&amp;E Management Program</b> (develop, implement)	<b>Safe Operation of Vehicle Lifting Devices</b> (develop, implement)
<b>Smoke-Free Workplace Policy</b> (update, implement)	<b>Ladder Safety Program</b> (update, implement)
<b>Managing Cold Stress Procedure</b> (develop, implement)	<b>Mobile Elevated Work Platform Program</b> (develop, implement)
<b>Managing Heat Stress Procedure</b> (develop, implement)	<b>Scaffolding Program</b> (develop, implement)
<b>Training and Competency</b> (evaluate)	<b>Workplace Inspection Standard</b> (develop, implement)
<b>Hot Work Standard</b> (develop, approve)	