

Prioritizing TTC Asset State of Good Repair to Keep the System Moving Reliably: Outlook for Capital Budget 2026

Date: September 4, 2025

To: Strategic Planning Committee **From:** Chief Executive Officer

Recommendations

It is recommended that the Strategic Planning Committee:

- 1. Endorse the state-of good-repair unfunded capital requirements as outlined in Attachment 2, as the first priority for investment utilizing new funding made available to the TTC by any order of government.
- 2. Forward this report to members of the TTC Board, City Council, Government of Canada, and Province of Ontario to provide insight into the immediate critical capital priorities for the TTC.

Summary

Effectively managing the accumulated state of good repair (SOGR) backlog is a critical strategic objective for the TTC to ensure that existing assets can support transit service delivery and achieve service outcomes. Attracting new riders and retaining customer's confidence in the system requires sustained investment in the base network's assets. This is foundational and a pre-requisite to plans to expand and increase network capacity to capture new ridership long-term.

Significant progress was made during the 2025 budget process where incremental investments effectively reduced the projected SOGR backlog by 50% over the years 2025 to 2034. However, the unfunded portion of the TTC's 15 Year Capital Investment Plan (CIP) continues to be significant over the next 15 years, reflecting the constraints imposed by current funding availability and affordability.

TTC's Unfunded State-of-Good-Repair – \$11.9B over 15 Years (\$791M Annual)

With updates made for 2025, the 2025-2039 Capital Investment Plan, has identified capital investment needs that now total \$53.4 billion over the next 15 years, of which \$37.0 billion is unfunded. Of the total unfunded need, approximately \$11.9 billion is related to health & safety, legislative, and SOGR requirements.

Addressing state-of good-repair is essential for service reliability, which is why the TTC continues to place the highest priority on meeting health and safety, legislative and state-of-good-repair needs first. However, the scale of SOGR investment still required is crowding out opportunity to advance needed capacity enhancement investments to keep up with population growth and capture more ridership long term. This does not suggest that CIP requirements associated with growth and aspirational initiatives, such as Platform Edge Doors, are not important, but rather are dependent on the base system being maintained to achieve benefits of investment.

Immediate State-of-Good-Repair Priorities Requiring Funding in next 5 Years

Over the next 5 years, approximately \$2.2 billion of Health, Safety, Legislative and SOGR needs are unfunded. As an integrated network, each mode has immediate SOGR priority needs included in this unfunded amount. These include, but are not limited to:

- \$1.22 billion for conventional and Wheel-Trans bus fleet replacements, associated infrastructure and bus hoists to address immediate five-year needs at minimum:
- \$208.7 million for critical subway systems (signals, electrical and communications) and equipment (escalators, elevators, ventilation and subway pumps/backflow preventers)
- **\$210.5 million** for facility renewal programs including roofing rehabilitation, HVAC replacements, overhead doors, safety systems and infrastructure renewal projects; and;
- \$84.6 million for streetcar track replacement in the first five years.

The 2026 Budget Process

The TTC's CIP is a rolling plan reviewed annually to incorporate new requirements based on asset condition assessment, revised estimates based on project design maturity, and economic factors. The above are immediate examples identified within the currently approved CIP. The annual budget process is underway and information from recent asset condition assessments indicate additional SOGR needs in streetcar overhead, subway track, and integrating facility improvements to accomplish net zero requirements are likely to be introduced in the next iteration of the CIP.

Priority focus on state-of-good-repair will continue to dominate prioritization of new funding made available to the TTC. Timely investment in state-of-good-repair is essential to maintain asset reliability and avoid costly, inefficient extensions of asset life. The result, however, does mean that longer term capacity improvement programs continue to be partially funded or unfunded, in the context of the TTC's current fiscal framework. Given the scale of capital needs over the next 15 years, sustained, predictable, and multi-level government funding is critical to closing the funding gap and ensuring long-term system sustainability that can keep pace with growth. The information in this report will be used to guide future recommendations to the Board on any additional funding made available to the TTC by the City or other orders of government as part of the 2026 budget process.

TTC's Capital Investment Plan

The 2025-2039 CIP identified a total of \$53.4 billion in investment required, of which \$37.0 billion is currently unfunded. The TTC CIP organizes projects by project category and mode/portfolio, which are summarized in the chart and table below.

Chart 1: 2025-2039 Capital Investment Plan

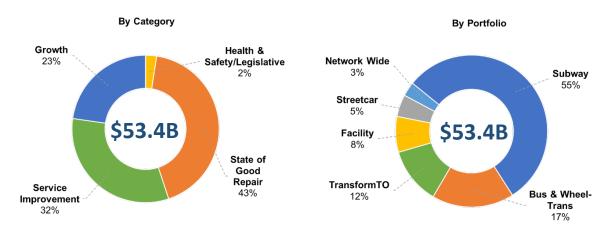


Table 1: 2025-2039 Capital Investment Plan (\$ Millions)

Category	Funded	Funded			Total CID
(\$millions)	\$	%	\$	%	Total CIP
By Category:					
Health & Safety	300.5	55%	245.3	45%	545.8
Legislative	592.6	79%	160.3	21%	752.9
State of Good Repair	11,202.0	49%	11,450.8	51%	22,652.8
Service Improvement	3,683.9	21%	13,571.2	79%	17,255.1
Growth	634.7	5%	11,523.2	95%	12,157.9
Total	16,413.7	31%	36,950.8	69%	53,364.5
By Portfolio:					
Subway	10,145.6	35%	19,236.2	65%	29,381.8
Buses & WT	2,884.3	31%	6,486.3	69%	9,370.6
Streetcar	1,364.2	54%	1,151.2	46%	2,515.4
Facility	1,284.6	31%	2,901.8	69%	4,186.4
Network Wide	735.0	50%	735.7	50%	1,470.7
Transform TO	-	0%	6,439.6	100%	6,439.6
Total	16,413.7	31%	36,950.8	69%	53,364.5

Approximately 45% of the 15-year plan is associated with Health and Safety, Legislated and State of Good Repair needs. The balance in unfunded requirements includes service improvement and growth projects to keep up with forecast demand, and long-term transformation initiatives that are aspirational in context of the overall CIP (e.g. TransformTO, Platform Edge Doors). The CIP does not include transit expansion

priorities of the City which are not budgeted as TTC projects (e.g. Eglinton East LRT, Waterfront Transit). Projects funded as part of the growth and service improvement categories are primarily due to specific intergovernmental funding programs and/or City development charge funding sources that are designated for growth and improvement type programs. Table 2 provides a breakdown by category.

Table 2: 2025-2039 Capital Investment Plan by Program/Project Category (\$ Billions)

Priority	Category	Funded	Unfunded	Total	% of CIP	Annually*
1	H&S, Legislated, SOGR	12.1	11.9	24.0	45%	0.79
2	Service Improvement	3.7	9.5	13.2	25%	0.63
3	Growth	0.6	5.1	5.7	11%	0.34
4	Transformational (PED, TransformTO)	-	10.5	10.5	20%	0.70
	Total	\$16.4 B	\$37.0 B	\$53.4 B	100%	\$2.5 B

^{*}Approximate average annual incremental funding required over the 15-year CIP.

Key Considerations in Allocation of Available Funding

The information below summarizes key considerations when determining the recommended allocation of available funding to needs identified in the CIP.

Category	Focus	Key Considerations in Allocation of Available Funding
Base Program – Health & Safety, Legislated and SOGR	Sustain Existing Base System	 Informed by Asset Management Plan Asset age, condition, lifecycle maintenance requirements; Legislative Requirements; Interdependencies between component parts of the network within each mode-based portfolio (e.g. fleet, facility and signal infrastructure). Capital Coordination with TTC SOGR and/or City works Cost effectiveness
Base Program – Service Improvement and Growth	Prepare for Future Growth	 Informed by the 5-Year Service Plan and 10 Year Outlook, and long-range demand projections (influenced by population, employment, land use, etc.). Forecasted Demand, Social, Economic, Environmental Benefits Customer Experience Capital Coordination with TTC SOGR and/or City works Interdependencies between component parts of the network within each mode-based portfolio (e.g. fleet, facility and signal infrastructure). Interdependencies with Provincial expansion projects (under construction and planned). Cost effectiveness

The capacity to deliver projects to plan is also assessed to ensure appropriate plans and resources are in place to effectively utilize scarce funding. A key consideration on an annual basis is the opportunity to deliver critical work within the system during available maintenance windows and/or closures. As all TTC capital work is delivered in a dynamic and live operating environment, balancing service delivery, customer experience, and the safe and productive delivery of capital works is a delicate balance. The TTC is undertaking a review at opportunities to further improve utilization of constrained maintenance windows.

Immediate Priorities by Mode: Unfunded Health & Safety, Legislative and SOGR

Capital investment challenges are present across all transit modes. It's essential to prioritize and distribute funding strategically throughout the network to maintain seamless operations. Table 3 outlines the total 15-year SOGR requirements by mode. Within this overall need, each mode faces urgent issues that demand immediate attention, as discussed further below.

Table 3: Health & Safety, Legislative and SOGR <u>Unfunded</u> Needs in the 2025-2039 CIP (\$ Millions)

Mode	15 Year Total Unfunded H&S, Legis. SOGR	%
Bus and Wheel-Trans	5,690.1	48%
Subway	3,209.6	27%
Streetcar	1,121.7	9%
Facilities	1,361.9	12%
Network Wide	481.9	4%
Total	11,865.2	100%

Bus and Wheel-Trans:

The bus fleet is the most flexible transportation mode. It is also critical to support planned maintenance work through closures and diversions and manage disruption to rail based modes. If the planned procurements for electric buses and charging infrastructure are not funded, the TTC's bus service will be significantly impacted, and operating expenditures will escalate due to an increase in required maintenance activities. Immediate priorities include:

- \$1.04 billion for the procurement of replacement buses and charging infrastructure
- **\$160.5 million** for the replacement of Wheel-Trans vehicles and associated infrastructure
- \$24.2 million for bus hoists replacements, assets critical to performing bus maintenance activities

As outlined in Attachment 2, investment is also needed for maintenance equipment, eBus/hybrid bus component replacements and accessibility improvements to bus stops.

Combined, these investments intend to ensure steady state fleet procurements and associated infrastructure are implemented to maintain the bus fleet and avoid degraded service levels. Failure to fully fund Wheel-Trans replacement buses will also have impact to TTC ability to meet accessibility needs of customers who rely on service.

<u>Subway:</u>

TTC's subway system is the main arteries of the City of Toronto's transit network. Associated with the mode is a planned portfolio of investments within the TTC's CIP, outlining \$19.2 billion in required investments over the next 15 years. Within that amount \$3.2 billion is associated with unfunded health, safety, legislated and asset state of good repair needs. In the next 5 years, investments are required for critical subway systems such as signals, electrical and communications assets as well as equipment replacement programs for escalators, elevators, ventilation and subway pumps/backflow preventers. In addition to the subway systems and equipment assets, investment is also needed for structure rehabilitation programs and maintenance equipment. While not presently unfunded in the first 5 years of the 2025-2039 CIP, the 2026 budget process indicates a need to increase investments for subway track replacement.

In summary, immediate priorities to address subway SOGR include:

- \$73.1 million for signals, electrical and communications assets within the subway system that are critical for the continuous, safe and reliable service delivered by TTC subway trains; and;
- \$135.6 million for escalator/elevator renewal programs to ensure continued access for all types of riders, ventilation equipment and subway pump replacements/backflow preventers to provide resiliency in the event of flooding in stations/at track level.

Streetcar:

Streetcar SOGR requirements over the next 15 years amount to \$1.1 billion. In the immediate term the priority is to secure funding of **\$84.6 million for streetcar track replacement programs** to enable planned work over next five years.

Given the current approved funding levels, the TTC will not be able to renew tangent track assets at a rate necessary to maintain and support existing service demands in a safe and reliable fashion to meet its SOGR needs. Results of an insufficient renewal rate could include restricted speed zones/slow orders, weekend/multi-day service diversions/closures, and/or emergency service interruptions.

Facilities and Network Wide:

The Facilities Program includes garages, yards, carhouses and various other buildings that play a critical role in supporting one or multiple aspects of the TTCs integrated network. These assets all require facility renewal programs to ensure building assets, such as HVAC, boilers, roofs, and structures are functional and maintained in a state-of-

good-repair but can also be retrofitted to reduce energy consumption. **Approximately \$347.7 million in various facilities works** is identified in first five years.

The Network Wide Program is not mode specific but includes assets that indirectly support the integrated network of transit services. The program includes but is not limited to information technology systems and automotive non-revenue vehicles to enable the TTC workforce in performing operational, maintenance and core work. Approximately \$163.9 million is identified across these programs in first five years.

Attachment 2 provides a break down by the key modes of the unfunded SOGR capital requirements, the risks and impacts of insufficient funding.

Intergovernmental Funding

The TTC relies on capital funding from all orders of government. The 2025 -2034 approved 10-Year Capital Plan is funded predominantly through City funding sources, which represents nearly 66% of total capital funding for the TTC, while provincial funding contributes 13% and federal funding provides 21%. Notably, within City funding sources, approximately \$1.43 billion is from development charges which are specifically allocated to fund growth projects. The remaining \$14.98 billion is available to address all project categories, but most notably Health & Safety, Legislative and SOGR.

Table 4: 2025 - 2034 Capital Funding Sources (\$ Millions)
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City of T 10,86 66	1.38	Provir 2,097 13%	.02	Federal 3,455.28 21%			
City Building Fund	7,347.01	PTIF II	436.50	PTIF II	486.18		
Debt	1,803.66	Provincial Gas Tax 866.22		03.66 L		CCBF	1,898.37
Development Charges	1,432.11	Streetcar Program	55 98		92.11		
TTC Internal	268.85	Ontario/City New Deal	738.32	Zero Emission Transit Fund	226.33		
Other	9.74			CPTF	752.29		

Apart from the Provincial Gas Tax and Canada Community Building Fund (CCBF), provincial and federal capital funding contributions in the plan are from one-time grant application programs which require matching municipal contributions. Examples of project-based funding in the Capital Plan:

- \$349 million in federal funding under the Zero Emission Transit Fund for 340 e-buses and 248 charging points (50%-50% federal, municipal matching program);
- \$360 million in provincial and federal funding for the procurement of 60 new accessible streetcars and towards modernization of Hillcrest Facility (1/3 federal, provincial, municipal matching funding);

• Up to \$1 billion in provincial and federal funding for the Bloor-Yonge Capacity Improvement project under the Investing in Canada Infrastructure Program (ICIP) (1/3 federal, provincial, municipal matching funding);

In addition, the TTC has a baseline funding allocation of \$1.2 billion under the Canada Public Transit Fund which is contributing towards the Line 2 subway trains and other state-of-good-repair requirements. Funding from this program will start to flow in 2026.

While these grant-based contributions to individual projects are appreciated, there remains a need for a long-term sustainable funding solution for public transit that is predictable and supports long term planning for capital investment. The priorities in this report will inform ongoing intergovernmental engagement at both the provincial and federal level to close the funding gap in the TTC's CIP with a focus on priority SOGR.

The federal Canada Public Transit Fund is an important program and a first step in addressing TTC needs. In particular, the Baseline Funding stream which relies on a formula of 70% ridership and 30% population represents a flexible and predictable funding source that should be strengthened with additional funding. The TTC has allocated its current Baseline Funding Allocation towards priority SOGR projects and is working closely with the federal government to expedite approvals.

Provincially, the Gas Tax Program is a long-term, flexible funding source that is funded by a 2-cent-per-litre gas tax since 2007 but has seen its purchasing power drop due to inflation. The TTC allocates approximately half of its annual allocation to capital state-of-good-repair, with the residual supporting the operating budget. Protecting the value of the provincial gas tax program is a key area of advocacy efforts amongst transit industry associations and partner agencies.

Conclusion and Next Steps

Within the CIP, the highest priority is upholding the state of good repair and compliance with health, safety and legislated requirements. An estimated \$11.9 billion over the next 15 years is unfunded, with immediate funding needed for all modes detailed in Attachment 2.

The TTC has made significant progress in enhancing its ability to deliver on planned initiatives and ensuring that annual funding allocations are used effectively. In 2024, the TTC achieved a capital spending rate of 94.8%. The TTC will continue to make every effort to ensure effective utilization of limited funds available to address the highest priority needs of the TTC.

The insights provided in this report will inform future recommendations to the Board regarding any additional funding allocated to the TTC by the City or other levels of government as part of the 2026 budget process. Since the CIP operates as a rolling plan, the funding requirements outlined in the 2025–2039 CIP may be revised during the 2026 budget process due to factors such as inflation, evolving design details, updated assumptions, emerging risks, condition assessments, and more, creating additional funding pressure.

Diversity, Equity and Inclusion Matters

The TTC is an important contributor in creating access to opportunity and the conditions for an inclusive Toronto. The TTC serves a diverse customer base, reflective of the diversity of Toronto and the surrounding region. In 2024, the TTC provided more than 423.4 million customer trips. The geographic coverage and seamless integration of the TTC's multi-modal system enables the TTC to serve equity-deserving communities across Toronto. TTC customers are diverse and use the system at different rates.

For many, public transit is a primary mode of mobility. The TTC's commitment to equity and accessibility is also reflected in how it plans and delivers transit services, and continues to seek ways to improve its approach.

The TTC continues to work toward creating new partnerships and strengthening current ones, based on respect and transparency, to foster and improve trust between the TTC and the community. The TTC is strongly committed to making Toronto's transit system barrier-free and accessible so that all customers can enjoy the freedom, independence, and flexibility to travel anywhere on the public transit system, regardless of ability. Inadequate financial support for public transit will have a significant implication on the achievement of an inclusive Toronto and Region.

Innovation and Sustainability Considerations

The TTC has two critical roles under TransformTO that must be delivered to help the City of Toronto achieve its goal of net zero GHG emissions by 2040. One is to decarbonize its operations, particularity the bus fleet, and the other is to substantially increase service frequency as one of the city-wide actions required to enable a modal shift towards public transit and active transportation.

Neither of these roles can be delivered without funding for state of good repair of existing transit assets. Without the necessary reductions in direct, indirect, and avoided emissions by the TTC, the City as whole will not be able to do its part to address the climate emergency.

Corporate Plan Alignment

As outlined in the *TTC's Corporate Plan - Moving Toronto, Connections Communities*, priority investment in state-of good repair is a key objective to sustain a reliable transit system and sets the foundation for attracting new riders and retaining customer loyalty. With one in four trips in Toronto on public transit, the TTC enables Toronto's population of over 3 million to access employment, education, services and social connections through our integrated network of subway, bus, streetcar and Wheel-Trans services.

Providing more than 100 plus interagency transit connections to GO Transit and 905 transit service providers, the TTC network is the most relied upon sustainable mobility service in the country. Failure to maintain TTC assets in a state-of-good-repair will impact the quality and level of TTC services enjoyed by customers today.

Financial Impact

The recommendations do not have a direct financial impact. The report provides an outlook on the immediate financial pressures of the TTC within the 2025–2039 CIP, which will inform the context for the 2026 capital budget and planning process.

The 2025 – 2039 CIP identifies \$53.4 billion in capital requirements across all modes and project categories. The 2025-2034 Capital Budget and Plan allocated \$16.4 billion in funding leaving approximately \$37.0 billion unfunded over 15 years, averaging at approximately \$2.5 billion annually for all project categories in the CIP.

Of the total \$53.4 billion identified over 15 years, approximately 43% of the plan, or \$23.9 billion is associated with *health, safety, legislated and SOGR*. Of these categories, approximately \$11.9 billion is unfunded over the next 15 years, with nearly half (\$5.7 billion) of the SOGR unfunded amount associated with Bus and Wheel-Trans modes.

The Executive Director, Finance has reviewed this report and agrees with the Financial Impact Assessment.

Contact

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Attachments

Attachment 1 – Decision History

Attachment 2 – Capital Investment Plan: Focus on Unfunded State-of-Good-Repair

Attachment 1 – Decision History

The following reflects relevant recent TTC Board decisions:

At its meeting on January 10, 2025, the TTC Board approved the 2025-2034 TTC Capital Budget and Plan of \$14.615 billion over the 10-year period, with \$1.618 billion approved in the 2025 Capital Budget.

Report: Recommended 2025 Operating Budget; 2025-2034 Capital Budget and Plan and 15-Year Capital Investment Plan and Real Estate Investment Plan Update

Decision: Recommended 2025 Operating Budget; 2025-2034 Capital Budget and Plan and 15-Year Capital Investment Plan and Real Estate Investment Plan Update

At its meeting on April 16, 2025, the TTC Board approved the TTC's 2025 Asset Management Plan (AMP), Policy and Strategy. The AMP was provided in compliance with the Asset Management Planning for Municipal Infrastructure Regulation, O. Reg. 588/17 (as amended by O. Reg. 193/21).

Report: 2025 TTC Asset Management Plan and Procurement Amendment Authorization Decision: 2025 TTC Asset Management Plan and Procurement Amendment Authorization

At its meeting on July 17, 2025, the TTC Board received a 2025 mid-year update on the approved TTC Corporate Plan *Moving Toronto, Connecting Communities, TTC Corporate Plan 2024-2028 & Beyond*, which is the guiding document for the TTC's multi-year planning activities. Prioritizing State of Good Repair is a key objective of the plan (2.4), and is foundational to attracting new riders, retaining customer loyalty, and enabling transit as a mode of choice.

Report: <u>TTC Corporate Plan 2024 – 2028: Mid-Year 2025 Progress Update</u> Decision: TTC Corporate Plan 2024 – 2028: Mid-Year 2025 Progress Update

At its meeting on July 17, 2025, the TTC Board received an update on the status of the TTC's Capital Plan submission under the Baseline Capital Funding stream of the Canada Public Transit Fund (CPTF) and implications for the 2026 Budget process.

Report: Canada Public Transit Fund
Decision: Canada Public Transit Fund

Attachment 2

TTC Capital Investment Plan: Focus on Unfunded State-of-Good-Repair







Introduction

TTC's bus fleet is the workhorse of the system and the most versatile fleet, critical for providing seamless transit across more than 160 bus surface routes. Approximately 60% of all TTC trips involve at least part of the journey on the bus network. In addition to regular service, the bus fleet provides replacement service for streetcar and subway modes for planned and unplanned events including construction, rail closures/diversions and city events.

Bus & Wheel-Trans 15 Year

Total CIP: \$9.37B Funded: \$2.88B Unfunded: \$6.49 B Unfunded SOGR: \$5.69 B

Wheel-Trans serves as the City's accessible transit service, providing a safe and dependable mobility option for individuals with disabilities and mobility challenges. With a customer base exceeding 42,000 registered users, the TTC facilitates more than 4 million door-to-door trips each year within Toronto.

Transforming and Electrifying Bus Service represents a planned portfolio of investments under the TTC's Capital Investment Plan, which details a need for \$9.37 billion over the next 15 years for the bus and Wheel-Trans networks. Of this amount, approximately \$5.69 billion (or 62%) remains unfunded and is dedicated to health and safety requirements, legislative obligations, and maintaining assets in a state of good repair. This investment also supports the City of Toronto's TransformTO Strategy, which mandates the transition of the TTC's bus fleet to zero-emission vehicles as part of the regular vehicle replacement cycle.

Background

The Green Bus Program was first approved by the Board in November 2017 and included the introduction of the latest generation of hybrid-electric buses as a transitional step toward achieving a fully zero-emissions fleet by 2040. The program is aligned with provincial, federal, and international targets for emissions reduction. It is a key action under the City of Toronto's TransformTO Net Zero Strategy and the TTC's own 5-Year Corporate Plan, as well as its Innovation and Sustainability Strategy.

With the retirement of the last Orion VII Clean Diesel buses in 2024 (the last buses in the fleet without diesel particulate filters), the TTC has phased out its highest-emitting buses. Since the Green Bus Program was initiated, fleet-wide greenhouse gas (GHG) emissions have been reduced by over 25% through the procurement of 591 new hybrid-electric buses and 208 battery-electric buses. By the end of Q1 2026, the current order of 340 eBuses will have grown the zero-emission fleet to 400, making the TTC's bus fleet the greenest of large transit systems in North America.

Once our fleet is fully electrified, this transition is expected to avoid approximately 290,000 tonnes of carbon dioxide equivalent and 125 tonnes of criteria air pollutant emissions annually between 2040 and 2050. These emissions reductions are estimated to yield \$460 million in avoided social costs of carbon and \$2.8 million in healthcare costs avoided. This one action will reduce the TTC's direct organization-wide emissions by ~28% by 2030.

Immediate Priorities

The following section highlights the most immediate asset state-of good repair priorities within the next 5 years that require funding to be secured in the 2026 budget process.

1. Conventional/Wheel-Trans Buses and Electrification Infrastructure

The 2025-2034 Approved Capital Budget and Plan for the Green Bus Program includes \$1.7 billion in approved funding. The approved funding is split between the remaining funding to deliver 340 eBuses and 248 charge points with Federal funding support through the Zero Emission Transit Fund and \$1.2 billion in required matching City funding to prepare for future bus procurements and intergovernmental grant funding opportunities. However, significant funding shortfalls remain in the program with \$4.9 billion required in the 15-year CIP and an **immediate need of nearly \$1.2 billion** within the next 5 years for eBus and Wheel-Trans bus procurement and the associated charging systems as detailed in table 5.

If the planned procurements for electric buses and charging infrastructure are not funded, the TTC's bus service will be significantly impacted. In the first few years of absent new procurements, the TTC would be required to keep buses due for retirement in service longer than recommended, increasing the pressure on the operating budget for necessary maintenance activities. As these buses continue in service beyond their useful life, breakdowns would become more frequent, which would impact the spare ratio and number of buses available to deliver service. With aging buses, parts obsolescence also becomes an issue, and the difficulty experienced sourcing key parts may require certain bus types to be retired.

2. Bus Hoist Replacement

There are around 200 bus hoists located in bus garages throughout the Toronto Transit Commission used to perform critical maintenance work. These hoists are in varying degrees of age and condition, and many are nearing the end of their life cycle. The degradation of these hoists could lead to serious safety issues and even potential facility shutdown at Arrow Road, Malvern Garage and Birchmount Garage if the immediate **5-year unfunded requirement of \$24.2 million** is left unaddressed.

Along with the need for bus hoists for articulated buses, one of the major immediate concerns is that approximately 50 scissor hoists at various Bus Garages have exhibited signs of premature, but substantial deterioration. Consequently, these hoists will be incapable of meeting their originally estimated service life and will need to be replaced.

The issues with scissor bus hoists are causing a significant increase in the programs scope of work. Moreover, the replacement schedule needs to be fast-tracked in large part due to safety hazards associated with the existing scissor hoists, which will continue to be susceptible to material/weldment failures.

Capital funding is required to reduce risk of bus hoist failures, associated safety risks, as well as risks of downtime, which could impact the number of buses available for service if staff are unable to perform required maintenance work.

Table 5: Immediate Unfunded eBus and Wheel-Trans Programs - First 5 Years (2025-2029)

Immediate Priority	Impact of Not Investing	Funding Required
Purchase of eBuses Approximately 530 eBuses	 Extending the life of the bus fleet past its useful life through a Life Extension Program (Capital Investment Required) Transition to a fix on fail maintenance practice and focus only on safety critical components and systems (i.e. declining reliability and availability) Reduction of service Limit to bus replacement services to support rail closures (also for maintenance work), city construction and events. Reduction of vehicle commissioning and decommissioning workforce requirements 	\$571.2 million*
Charging Systems – eBuses Approximately 950 charge points	 Reduction of bus service Delayed implementation of green bus program and failure to achieve the TransformTO net zero target by 2040. 	\$464.0 million*
Purchase of Wheel-Trans Buses Approximately 82 eWheel- Trans buses	 Like other fleets, the inability to replace buses within its proper asset life will result in a degradation/ reduction of service. Negative impact to customers who rely on service for medical appointments and treatments, etc. Barrier to achieving transit accessibility; reduced social equity Reduction/ elimination of vehicle commissioning and decommissioning staff; and operators due to service impacts. 	\$121.9 million
Charging Systems – Wheels-Trans Buses Approximately 170 charge points	 Reduction of bus service Delayed implementation of green bus program and failure to achieve the TransformTO net zero target by 2040. 	\$38.5 million
Total		\$1.196 billion

^{*}Note: Required matching funding with the City/TTC share of funding in the approved Capital Plan.

Table 6: Unfunded Bus and Wheel-Trans: SOGR Requirements in the Capital Investment Plan

Project	Description	H&S, Legislative and SOGR Cash Flow Requirements (\$000's)								
Project	Description	2025	2026	2027	2028	2029	5-Year Total	10-Year Total	15-Year Total	
FLEET - UNFUNDED										
Purchase of Buses	Purchase of zero emissions conventional service buses to replace buses at end of asset life.	-	64,461	142,584	207,809	156,356	571,210	1,977,653	3,427,743	
Purchase of Wheel-Trans Buses	Purchase of accessible buses for WT service to replace buses at end of asset life.	-	-	12,244	7,916	101,767	121,927	260,383	385,063	
Bus Hoists	Bus Hoists required for maintenance of crucial revenue vehicles.	-	1,556	3,883	6,345	12,405	24,189	126,412	258,954	
Bus Overhaul	Fix-on-Fail Major Hybrid Component & eBus Capital Spare Replacements	726	1,157	897	3,199	3,603	9,581	31,556	423,379	
Other Fleet	Bus cleaning infrastructure, and various bus maintenance equipment purchases	-	1,010	6,668	1,763	250	9,691	9,691	9,731	
INFRASTRUCTURE -	UNFUNDED									
Charging Systems - Buses	Bus charging system required for the operation of zero emission conventional buses	-	151,422	141,620	100,390	70,604	464,036	937,433	1,000,809	
Charging Systems - Wheel-Trans Buses	Bus charging system required for the operation of zero emission Wheel-Trans buses	3,134	14,021	9,007	8,903	3,496	38,562	39,567	40,920	
Structures	Bus stop accessibility improvements and modifications to accommodate articulated buses	-	8,888	15,348	21,802	31,721	77,759	143,534	143,534	
TOTAL BUS AND	WHEEL-TRANS PORTFOLIO	3,860	242,515	332,252	358,128	380,202	1,316,956	3,526,228	5,690,133	

2. Streetcar: Unfunded State of Good Repair Capital Requirements

Introduction

The TTC's streetcar network plays a vital role in connecting some of Toronto's fastest-growing neighborhoods to key cultural, academic, healthcare, and entertainment destinations, enhancing the vibrancy and accessibility of the city for residents and visitors alike. In 2024, the fleet operated across 11 routes and supported more than 79.3 million passenger boardings.

Streetcar CIP 15 Year:

Total CIP: \$2.51 B Funded: \$1.36 B Unfunded: \$1.15 B Unfunded SOGR: \$1.12 B

To meet ridership demand, ensure consistent service delivery and operational efficiency, a reliable and well-maintained fleet and infrastructure is essential. The *Supporting a Larger Streetcar Fleet* is a planned portfolio of investment within the TTC's Capital Investment Plan, which outlines \$2.51 billion in investment over the next 15 years. Within that amount \$1.12 billion is associated with unfunded health, safety, legislated and asset state of good repair needs.

Background

Given the investment from the Federal and Provincial governments of \$180 million each, the TTC is procuring 60 new accessible streetcars in addition to the 204 already in service. The federal contribution is also allocated to making necessary structural and track upgrades to expand the maintenance and storage capabilities at the TTCs Hillcrest Complex. To further support the streetcar portfolio of assets, the TTC has funded the renovations for the Russell Carhouse to accommodate the service needs of an expanded streetcar fleet.

As a key outcome of the CIP's linking of interdependent projects, the TTC is well on its way to supporting the capacity requirements of a larger streetcar fleet. However, ensuring that the streetcar network and complimentary assets are maintained in a state of good repair requires an additional \$1.12 billion.

Immediate Priorities

The following section outlines the most urgent asset state of good repair priorities anticipated over the next five years, for which funding must be secured through the 2026 budget process.

1. Surface Track:

Ensuring capital funding and effectively managing SOGR initiatives for the TTC's surface track network is a critical priority to support the continued delivery of safe, reliable, and seamless transit service. Over the next five years (2025–2029), an investment of **\$84.6 million** is required to maintain these assets in a state of good repair.

Given the current approved funding levels, the TTC will not be able to renew surface track assets at a rate necessary to maintain and support existing service demands in a safe and reliable fashion to meet its SOGR needs. Results of an insufficient renewal rate could include restricted speed zones/slow orders, weekend/multi-day service diversions/ closures, and/or emergency service interruptions. Even when attempting to utilize more operating resources within preventive or corrective maintenance programs, the TTC may find it necessary to plan and prioritize condemning some rail corridors in favour of renewing others, and some may be fully placed out of service, with key intersections being the most at risk.

2. Systems:

Immediate streetcar systems requirements in the 5-year window amount to **\$3.4 million**. Critical State of Good Repair initiatives include the installation of alternative electrical feeds at key intersections, reconstruction of overhead cable chambers, the integration of Geographic Information System (GIS) technology to enhance the management of streetcar infrastructure assets, and the replacement, upgrade, and restoration of aging electrical feeds, lighting systems, and equipment. This work spans multiple locations, including surface loops (and associated facilities), streetcar platforms, yards, carhouses, and other streetcar support buildings.

Table 7: Immediate Unfunded Streetcar SOGR Requirements - First 5 Years (2025-2029)

Immediate Priority	Impact of Not Investing	Funding Required
Tangent/Special Surface Track Replacement Program	 Increased frequencies of unplanned interruptions to road traffic and local communities Sunk costs diverted to unplanned, emergency maintenance – including costs for alternate service arrangements Negative reputational consequences including reduced customer confidence Restricted speed zones/ slow orders, Service diversions/ closures, Condemnation and service removals. 	\$84.6 million
Systems	 Service disruptions and the inability to reroute Streetcars effectively Reliance on corrective maintenance programs and emergency maintenance interventions may increase because of limited resources Schedule impacts and misalignment with other established SOGR programs and initiatives, such as capital closures, TTC track work, and City/Toronto Hydro initiatives. 	\$3.4 million
Total Immediate Street	car SOGR Priorities	\$88 million

Table 8: Unfunded Streetcar SOGR Requirements in the Capital Investment Plan

			H&S, Legislative and SOGR Cash Flow Requirements (\$000's)								
Project	Description	2024	2025	2026	2027	2028	5-Year Total	10-Year Total	15-Year Total		
INFRASTRUCT	URE - UNFUNDED										
Surface Track	Replacement of streetcar tangent and special track	-	5,962	16,078	28,530	34,056	84,625	266,658	743,857		
Systems	TTC Cable Chambers, Alternative Feeds for Intersections, Surface AC and Lighting Upgrades, Asset Inventory Management	1,050	955	991	186	189	3,370	4,467	33,756		
Other Infrastructure & Equipment	Linear infrastructure and other surface traction power distribution	'	0	1,951	1,619	-	3,570	20,623	120,467		
FLEET - UNFUN	IDED										
Streetcar Overhaul	Comprehensive overhaul program to ensure the state of good repair of the streetcar fleet	-	-	-	-	1,003	1,003	214,716	214,716		
Other Fleet	Maintenance and streetcar carhouse shop equipment required for TTC streetcars	-	50	1,054	897	1,198	3,199	8,159	8,905		
TOTAL		1,050	6,967	20,073	31,231	36,446	95,767	514,623	1,121,701		

1. Introduction

In 2024, the TTC's subway system—considered the backbone of Toronto's transit network—recorded approximately 331.7 million annual boardings.

To ensure this vital service continues to meet current and future needs, the Modernizing the Subway and Expanding Capacity portfolio has been identified as a key area of investment within the TTC's 15-year Capital Investment Plan (CIP), with a total planned

Subway CIP 15 YR:

Total CIP: \$29.38 B Funded: \$10.15 B Unfunded: \$19.23 B **Unfunded SOGR: \$3.21 B**

investment of \$29.38 billion. Of this, \$3.21 billion remains unfunded and is tied to essential health and safety, legislated, and state of good repair (SOGR) requirements.

While not detailed below, the portfolio also includes unfunded components such as capacity enhancement initiatives and additional growth trains—both of which are critical to keeping pace with projected ridership growth, increasing urban density near transit corridors, and major expansion projects currently in progress. Despite the importance of these growth-oriented initiatives, maintaining the core subway infrastructure in a state of good repair is foundational to service reliability and safety, and is therefore prioritized as the first area for investment.

2. Background

The TTC's subway network comprises three lines that serve as key arteries within the City's integrated, multi-modal transit system. As part of a comprehensive asset management strategy, timely replacement of trains at end of life and the execution of state of good repair (SOGR) programs at key milestones are essential to ensuring the reliability of subway service and, by extension, the overall TTC network. Service disruptions on any line can lead to significant surface traffic congestion, overcrowding on connecting subway routes, and a diminished customer experience.

3. Immediate Priorities

The following section highlights the most immediate asset SOGR priorities within the next 5 years that require funding to be secured in the 2026 budget process.

Subway Systems SOGR

The main categories of systems relevant to the Subway Portfolio are communications, signalling, and electrical/traction power. These systems are critical for the continuous, safe and reliable service delivered by TTC subway trains. Signal systems control the movement on the subway lines to ensure all trains keep a safe distance between each other, electrical assets feed the power to the system, and communications assets provide a direct link between operators, Transit Control, platforms, and emergency services. In many cases, if one of these assets were to fail, service cannot operate.

Many of the TTC's systems assets are outdated and showing signs of deterioration. Priority projects requiring funding includes Radio Replacement, Integrated Communications System Replacement, McBrien Building Radio Relocation, Event Recorder Replacement, and Line 4 Re-signalling with \$73.1 million required in the first five years and \$159.1 million over the 15-year period.

Subway Equipment SOGR

From escalators and elevators to pumps and ventilation equipment, TTC has a vast array of subway system equipment in place to support a safe and reliable transit mode. In total, to maintain the state of good repair for the subway systems equipment assets would require \$1.1 billion over the 15-year CIP, with the immediate requirement of \$135.6 million needed in the first 5 years.

Table 1: Immediate Unfunded Subway Equipment SOGR Requirements - First 5 Years (2025-2029)

Immediate Priority	Impact of Not Investing	Funding Required
Escalator Replacement Program	 Potential non-compliance, dependent on location and station designs with NFPA 130 and Ontario Building Code Crowding in stations and platforms causing a serious safety concern or potentially require a station to be bypassed. 	\$63.8 million
Subway Pump Replacement Program	 Increase in pump failures and excessive service disruptions 88 pumping stations by year 2033 exceeding their expected service life, 	\$20.1 million
Subway Bus Platform Ventilation Equipment	Exceedance in toxic gas concentrations from diesel combustion exhaust in bus platform areas may potentially impact passenger and employee safety/health/comfort at an affected subway station Non-compliance with Ontario Ministry of Labour regulations and Ontario Building Code requirements	\$14.6 million
Backflow Preventers	Non-compliance with City of Toronto Water Supply By-Law exposes the TTC to legislative fines and increased risk of reputational damage should a backflow incident occur.	\$4.3 million
Elevator Overhaul Program	 Potential increase in safety hazards resulting in increased employee occupational hazards. Elevator must be shut down if not in compliance with ASME A17.1/CSA B44 Safety Code for Elevators and Escalators Major inconvenience to the public and specifically people with disabilities 	\$32.8 million
Total		\$135.6 million

Table 2: Unfunded Subway SOGR Requirements in the Capital Investment Plan

Project	Description	H&S, Legislative and SOGR Cash Flow Requirements (\$000's)								
		2025	2026	2027	2028	2029	5-Year Total	10-Year Total	15-Year Total	
INFRASTRUCTURE - UNFUNDED										
Systems	Traction power, power distribution / electric systems, communications and signal systems	4,672	3,836	7,486	26,005	31,061	73,060	151,889	159,088	
Station Equipment	Escalator, elevator, pump and platform ventilation replacement programs	1	4,278	18,299	41,173	71,856	135,607	715,346	1,101,808	
Other Subway Infrastructure	Various infrastructure replacement and upgrades supporting the TTC subway systems	-	2,141	6,580	11,064	14,078	33,863	210,661	1,668,300	
FLEET - UNFU	FLEET - UNFUNDED									
Purchase of Subway Cars*	Purchase of 55 new subway trains to replace the aging T1 trains on Line 2	-	-	-	-	1	-	-	52,953	
Subway Car Overhaul	Overhaul of the TR subway fleet to maintain state-of good-repair	-	-	-	-	-	-	-	139,928	
Other Fleet	Engineering and shop equipment purchases	-	500	1,485	1,987	7,710	11,682	62,887	87,501	
TOTAL SUBWAY PORTFOLIO		4,672	10,755	33,851	80,229	124,705	254,211	1,140,783	3,209,578	

^{*}Note: Line 2 replacement trains are fully funded in the 10-year window with commitments to fund the post 10-year requirement.

4. Facility State of Good Repair Requirements

The State of Good Repair (SOGR) requirements for TTC facilities encompass garages, yards, carhouses, and various other buildings that are critical to supporting one or more components of the TTC's integrated transit network. These facilities require ongoing renewal programs to ensure key building systems—such as HVAC, boilers, roofs, and structural elements—remain functional and in a state of good repair.

In addition to preserving asset integrity, these programs also present opportunities to support the TTC's Net Zero 2040 objectives through energy-efficient retrofits. Failure to adequately maintain these facilities could result in safety risks, work refusals, and potential partial or full closures, which may negatively impact service delivery depending on the facility affected.

Subway Facility Renewal Program

The subway facility renewal program consolidates various work packages of state of good repair work at subway facilities, totalling \$132.5 million over 10 years. However, the most critical immediate need within the program is the **Wilson Station Precast Panel Removal** project. The key goal of this project is to replace the exterior and interior cladding of Wilson Station, along with conducting a comprehensive analysis of the support structures exposed or impacted during the replacement process.

Risks of not investing include concrete delamination potentially falling off and hitting vehicles/pedestrians on Wilson Avenue below the station. With the detailed design phase planned to begin in 2026, this project would require **\$2.2 million within the first 5 years and a total of \$52.8 million** over the long term.

Roofing Rehabilitation Program

A significant number of roof assets across TTC facilities—including subway and rapid transit stations, garages, carhouses, shops, substations, office buildings, and other supporting infrastructure—have exceeded their expected service life. To mitigate rising maintenance costs, prevent structural deterioration, and protect mechanical and electrical systems from moisture-related damage, a sustained roof replacement and rehabilitation program is required.

Currently, this program is underfunded. The Capital Investment Plan (CIP) identifies a need for \$94.6 million over the first five years and a total of \$325.1 million over the 15-year planning horizon. Without timely roof system replacements, continued deterioration will lead to increased leakage, structural damage, unsafe conditions due to slippery surfaces, operational disruptions, and rising annual maintenance costs.

HVAC Replacement

Along with assuring that the HVAC equipment can deliver reliable heating and cooling to occupied areas, this project has been identified as a high priority due to:

- Compliance requirements with Occupational Health and Safety Act (OHSA),
 Regulation 851 Industrial Requirements, mandating minimum temperature in enclosed workspace (S.124 (1))
- Continued need for compliance with Standard ANSI/ASHRAE 62.1, Ventilation for Acceptable Indoor Air Quality (as referenced in TTC Design Standards), mandating certain air exchange rates for ventilation of occupied areas.

In total the program requires \$57.9 million within the first 5 years, and \$156.2 million to fully fund the 15-year program. Currently the unfunded portion of the program largely relates to Eglinton Garage (\$50.2 million over 10 years starting in 2026), as well as partial funding required to top-up the replacements at Malvern Garage (\$89.2 million over 10 years starting in 2026). Arrow Garage is also partially unfunded in 2032.

Overhead Doors

Based on the current inventory, TTC is responsible for maintenance of 613 Overhead Door assets. Out of this inventory, 265 doors (43% of the total) have already exceeded their Expected Service Life (ESL), leaving 348 doors within their ESL. Without increased investment for asset replacement, the number of assets within their ESL will trend downward, with a steep drop projected in 2027, when an additional 92 doors will exceed their respective ESL.

Currently the CIP identifies these 92 Overhead Door assets as the most urgent priorities for end-of-life replacement, with an immediate **5-year need of \$5.6 million and a 15-year total need of \$69.2 million.** A lack of investment could result in safety risks as failing doors pose risk of contact with TTC vehicles or pedestrians and may cause serious injury. Legislative risks also exist as doors that fail to open position during cold weather may result in non-compliance with Occupational Health and Safety Act Regulation 851 Industrial Requirements, and potential non-compliance with Ontario Fire Code if a faulty door is part of the fire separation or emergency fire egress protocols.

Safety Related Systems

Safety is a core value of the TTC, and maintaining facilities in a state of good repair—particularly for critical sprinkler, gas detection, emergency power and fire main systems—is essential to upholding the highest operational safety standards. The total investment required for these priority projects is estimated at \$26.4 million over the next 15 years, with most of the funding (\$22.9 million) needed within the first five years. Priority safety systems replacement projects include the Harvey Shop sprinkler system, Roncesvalles Yard and Eglinton Fire & DCW Main, Gas Detection & Monitoring System, as well as Mt. Dennis emergency backup power systems.

Table 3: Unfunded Facilities SOGR Requirements in the Capital Investment Plan

Project	Description	H&S, Legislative and SOGR Cash Flow Requirements (\$000's)							
		2025	2026	2027	2028	2029	5-Year Total	10-Year Total	15-Year Total
INFRASTRUCT	URE - UNFUNDED								
Subway Facility Renewal Program	Maintains station structure integrity and prevents risk of damage to the facility.	-	1,331	4,112	10,360	13,714	29,516	132,534	147,694
Roofing Rehabilitation Program	Rehabilitation program of roof assets at various TTC facilities.	-	933	12,003	37,977	43,723	94,635	211,448	325,127
HVAC Replacements	Ensure the equipment will be capable to provide adequate and reliable delivery of heating and ventilation in occupied building areas.	-	333	11,785	19,575	26,200	57,893	150,852	156,160
Overhead Doors	Overhead door replacement and refurbishment at various bus garages and streetcar carhouses.	-	100	700	1,589	3,214	5,603	59,754	69,210
Safety Related Systems	Safety crucial sprinkler, fire mains, gas detectors and emergency power systems	-	1,900	3,100	9,450	8,450	22,900	26,400	26,400
Other Facility Renewal Programs	Various facility/yard renewal and construction projects, property requirements, on-grade paving rehabilitation and Masonry Structure Restoration Program	45,000	5,918	26,430	34,039	25,736	137,124	461,302	637,321
TOTAL FACILITY PORTFOLIO		45,000	10,515	58,130	112,989	121,037	347,671	1,042,290	1,361,912

5. Network Wide State of Good Repair Requirements

Some of the assets that the TTC maintains do not support a specific mode but indirectly support the integrated network of transit services. The table below summarizes the key Health and Safety, Legislative and SOGR investments, necessary to support Network Wide Assets.

Table 4: Unfunded Network Wide SOGR Requirements in the Capital Investment Plan

Project	Description	H&S, Legislative and SOGR Cash Flow Requirements (\$000's)								
		2025	2025	2026	2027	2029	5-Year Total	10-Year Total	15-Year Total	
INFRASTRUCTU	JRE - UNFUNDED									
IT Systems / Infrastructure	Various IT systems/software and infrastructure SOGR programs, including the Corporate Camera Strategy and Delivery	953	1,498	10,046	32,384	33,286	78,167	107,087	190,026	
Equipment	Fall prevention systems and various Plant Maintenance equipment purchases	-	-	395	456	254	1,105	4,369	21,703	
FLEET - UNFUNDED										
Charging Systems - Automotive NRV	Charging Systems for procurement of electric automotive non-revenue vehicles	7,662	7,856	9,698	8,614	7,371	41,201	93,584	108,757	
Purchase of Automotive NRV	Procurement of service trucks, utility trucks, road rail overhead service trucks and various vehicles for various TTC departments	-	11,251	5,915	8,438	17,864	43,468	161,411	161,411	
TOTAL NETWORK WIDE PORTFOLIO		8,614	20,605	26,053	49,892	58,775	163,940	366,450	481,896	

Information Technology System / Infrastructure

Technology continues to play a critical role in supporting both business modernization efforts and state of good repair (SOGR) programs. Accordingly, several ITS systems and equipment initiatives are currently underway and fully funded. However, the primary constraint within this program area relates to the Corporate Camera Strategy and Delivery project. This health and safety initiative was established to implement a standardized, centralized framework for the deployment, oversight, and governance of TTC's closed-circuit television (CCTV) systems, policies, and procedures. The project aims to embed principles of reliability, as well as customer and employee care, into CCTV practices across the organization.

Automotive Non-Revenue Vehicles

Automotive Non-Revenue Vehicles are utilized across multiple TTC departments to support operational and maintenance activities. This program includes the procurement of various vehicle types such as service trucks, cargo vans, utility and vacuum trucks, fuel trucks, pickup trucks, road-rail overhead service vehicles, and others, based on the specific needs of user groups. While the design life of these vehicles typically ranges from 7 to 15 years, the actual average age of the fleet currently ranges from 8 to 20 years. The fleet management plan considers factors such as vehicle usage, age, annual condition assessments, and maintenance costs to determine the optimal timing for replacement. However, due to funding constraints, many vehicles are retained well beyond their recommended service life. Ongoing underinvestment in this program will lead to increased maintenance expenditures and diminished operational efficiency, particularly if user groups are unable to perform core functions due to a lack of reliable vehicles.

Automotive Non-Revenue Vehicles - Charging Systems

Interdependent with the purchase of Automotive Non-Revenue Vehicles, the purpose of the Charging Systems program is to implement electrification infrastructure to support the transition of the non-revenue fleet to zero emissions by the year 2040. The Program consists of the implementation of electrification infrastructure retrofits at various TTC facilities.