

For Action with Confidential Attachment

Budget Adjustment for the Purchase of Gasoline Wheel- Trans Vehicles, and Introduction of Smaller Electric Vehicles

Date: July 17, 2025 **To:** TTC Board

From: Executive Director – Innovation and Sustainability

Chief Transportation and Vehicles Officer

Reason for Confidential Information

This report contains information related to a position, plan, procedure, criteria, or instruction to be applied to any negotiations carried on or to be carried on by or on behalf of the City or local Board.

Summary

This report recommends a budget adjustment to allocate funds for procurement of 105 gasoline-powered paratransit buses for Wheel-Trans service.

In parallel to the trial of all-electric Wheel-Trans (eWT) buses reported in February 24, 2025, these 55 six-metre and 50 seven-metre ProMaster buses will be delivered between 2026 and 2029 in time to replace vehicles that are reaching the end of their design life. Should the eWT pilot be successful, these 105 gasoline-powered buses will be the last we procure, and the fleet will be zero-emissions by 2035, 5 years ahead of the TransformTO NetZero target.

Subject to the re-allocation of requested funds, these vehicles will be procured using Metrolinx's Transit Procurement Initiative (TPI) program, a Metrolinx-led process that is competitively procured and enables Ontario transit agencies to benefit from reduced costs through joint procurement. In October 2024, Creative Carriage was awarded the contract for six-to-eight-metre paratransit buses following a competitive process under TPI. Since 2017, the TTC has procured 371 gasoline-powered paratransit vehicles from Creative Carriage through prior agreements under this initiative, which continues to represent the best available option in terms of cost and quality.

This report also informs the Board of an upcoming pilot program to introduce smaller electric vehicles, likely sedans or SUVs, to the Wheel-Trans fleet to optimize the fleet mix and enhance Wheel-Trans operations.

Recommendations

It is recommended that the TTC Board:

- 1. Approve expenditure adjustments to the TTC's 2025-2034 Capital Budget and Plan for the Purchase of Wheel-Trans Buses Program by amending the 2025 Capital Budget by \$0 and the 2026-2031 cash flow funding estimates by \$34.931 million to reflect the procurement of 105 Wheel-Trans Buses and to align with the estimated project delivery schedule.
- 2. Authorize the recommended budget adjustments noted in Recommendation 1 above, and in the TTC's 2025-2034 Capital Budget and Plan, to be included in the TTC's Capital Variance Report submission for the six months ended June 30, 2025, for City Council consideration and approval.
- 3. Adopt the recommendations contained in Confidential Attachment 1 and authorize that the information remain confidential.

Financial Summary

Procurement of Gasoline Buses

Based on the planned delivery schedule, Table 1 below summarizes the projected annual expenditure forecast over the contract's term to procure 105 Gasoline Paratransit Buses:

Table 1: Contract Expenditure Forecast by Year

	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	Total Contract Amount	
Gasoline Paratransit Buses (Quantity)	25	12	58	10	105	
Contract Expenditure (without HST)	\$5,369,498	\$2,423,861	\$17,242,495	\$2,875,481	\$27,911,335	
Non-Rebatable HST (1.76%)	\$94,503	\$42,659	\$303,467	\$50,608	\$491,240	
Total Contract Expense (1.76%) (excluding Contract Change Allowance)	\$5,464,001	\$2,466,522	\$17,545,962	\$2,926,090	\$28,402,576	
Rebatable HST (13%)	\$698,034	\$315,101	\$2,241,524	\$373,812	\$3,628,474	
Change Allowance with HST (13%)	\$303,376	\$136,948	\$974,200	\$162,464	\$1,576,990	
Total Contract, including HST (13%) (Including Contract Change Allowance)	\$6,370,909	\$2,875,911	\$20,458,220	\$3,411,758	\$33,116,800	

The total estimated cost for the purchase of the gasoline paratransit buses is approximately \$34.931 million, including the recommended contract costs, Consultant fees, Engineering and Project Management Labour, other external costs, and a contingency allowance. Subject to the approvals of Recommendation 1 above, and recommendations in the Confidential Attachment, the total estimated cost will be funded, as summarized in the table below:

Table 2: Revised 2025-2034 Capital Budget and Plan – Purchase of Wheel-Trans Buses Program

Purchase of Wheel-Trans Buses (\$ in 000's)	2025	2026	2027	2028	2029	2030	2031	2032 - 2034	10-Year Total
Council Approved Budget & Plan	'	ı	1	1	1	1	1	1	1
Funding Adjustment	-	5,774	3,039	19,480	3,929	2,708	-		34,931
Revised Capital Budget & Plan	•	5,774	3,039	19,480	3,929	2,708	1	1	34,931
CIP Unfunded	1	4,786	3,355	17,993	3,709	1,342	1,367	-	32,551
CIP Adjustment	1	(4,786)	(3,355)	(17,993)	(3,709)	(1,342)	(1,367)	1	(32,551)
Revised CIP Unfunded	1	ı	-		-	1	1	1	•
Total Capital Investment Plan	-	5,774	3,039	19,480	3,929	2,708			34,931

Procurement of Smaller Electric Vehicles

The procurement of up to 10 smaller electric vehicles for the pilot program to evaluate the Wheel-Trans fleet mix can be accommodated within the approved 2025 budget for the Wheel-Trans Battery-Electric Pilot Program. Unallocated funds of \$1,548,891 (with 1.76% Non-rebatable HST) is available within the program (IO 7285) to support the procurement of these vehicles.

The Executive Director – Finance, has reviewed this report and agrees with the financial impact information.

Equity/Accessibility Matters

The TTC is deeply committed to making its transit system barrier-free and accessible so all customers can enjoy the freedom, independence, and flexibility to travel anywhere on the public transit system.

Equity, Diversity, Inclusion, and Accessibility is a focus area under the TTC's Corporate Plan 2024-2028, targeting the ongoing application of equity, diversity, inclusion, and accessibility in day-to-day work. As a leader in providing accessible public transit in Toronto, the TTC remains committed to supporting individuals with accessibility needs by working toward a barrier-free service.

The new gasoline paratransit buses and smaller electric vehicles will be equipped with several accessibility features, which would help remove barriers to accessible transit. Throughout the design and development process, the TTC will verify that vehicles are compliant with relevant accessibility standards under the Canadian Standards Association (i.e. CSA D437 standard for accessible transit buses) and the Integrated Accessibility Standards – Part IV (Transportation Standards) under the Accessibility for Ontarians with Disabilities Act (AODA), and will leverage regional and international best practices. Staff will continue to work closely with the Advisory Committee on Accessible Transit (ACAT) to address the unique needs of as many persons as practicable, in order to advance the TTC's efforts toward a barrier-free transit system.

Innovation and Sustainability Matters

In 2017, the TTC began transitioning its diesel-fuelled Wheel-Trans fleet to lower-emission gasoline-fuelled vehicles, and decommissioned its last diesel Wheel-Trans vehicle in November 2023. In February 2025, the TTC Board approved procurement of five battery-electric pilot Wheel-Trans vehicles to be delivered in 2026, followed by a two-year evaluation program to inform bulk procurement, which is planned to be completed by 2028.

As a next step in modernization of the TTC's Wheel-Trans fleet, staff intend to procure up to 10 smaller electric vehicles, likely sedans or SUVs, as part of our ongoing effort to determine the optimized Wheel-Trans fleet mix. These smaller vehicles will serve the roughly 80% of Wheel-Trans customers who are ambulatory. They will be put into service and evaluated over a one-year period against certain criteria for suitability by customers and within Wheel-Trans operations. Results and lessons from this evaluation will inform fleet planning and future procurement.

Initial engagement has been held with ACAT to introduce this proposal, and further input will be sought during the procurement specification development and pilot evaluation process. If successful, the introduction of sedans/SUVs to the Wheel-Trans fleet will aim to increase accessibility and fleet reliability, reduce total cost of ownership (both capital and operating cost), and accelerate the transition to a zero-emissions fleet.

Decision History

See Attachment 2 for the Decision History.

Issue Background

The Wheel-Trans fleet currently consists of 270 buses and provides a safe and reliable accessible transit option for persons with disabilities. The demand for this service is expected to grow due to Toronto's aging population and the expansion of paratransit eligibility to people with disabilities beyond mobility impairments stipulated by the AODA.

In accordance with asset management best practices, the TTC develops fleet plans to ensure vehicles are replaced at the end of their design life. The Wheel-Trans fleet currently has three different bus models: the gasoline-fuelled six-metre ProMaster bus with a design life of five years, the gasoline-fuelled seven-metre ProMaster bus with a design life of six years and the pilot battery-electric 7.1-metre buses to be delivered in 2026 with an expected design life of 10 years.

Comments

Rationale for Gasoline ProMaster Bus Procurement

Between 2024 and 2026, 127 vehicles in the fleet will reach the end of their design life. To replace these buses, maintain the 2025 Budget-approved Wheel-Trans Fleet Plan, and meet service requirements, the procurement of 105 gasoline ProMaster buses is required. See Attachment 1 for an excerpt of the Wheel-Trans Fleet Plan.

Since their introduction in 2017, the performance of the gasoline ProMaster buses has met or exceeded their reliability targets. The vehicles being procured through this procurement will be the same as those currently in the fleet. These smaller vehicles are easier to maneuver throughout the city, allowing more flexibility in service operation routes and decreasing both trip and response times. In addition, with more customers using the Family of Services delivery model, the smaller vehicles match capacity to demand with shorter and more frequent trips, increasing Wheel-Trans' passenger perhour count and leading to higher asset utilization.

Table 3: Benefits of the six-metre and seven-metre ProMaster buses

Benefit	Description
Alignment with Corporate Plan	Procurement is required to support Corporate Plan Strategic Direction 2 by serving customer demand and improving accessibility.
Service Benefits	The ProMaster vehicles have high reliability, with a Mean Distance Between Failures of 42,000 km (six-metre) and 50,000 km (seven-metre) in 2024, which is above the 20,000-km internal target.
Alignment with Innovation and Sustainability Strategy	By 2026, the Wheel-Trans fleet will emit 33% less greenhouse gases compared to the diesel-only fleet in 2017. The TTC has also initiated a battery-electric Wheel-Trans bus pilot and plans to procure its last gasoline Wheel-Trans bus in 2029.
Financial Benefits	Gasoline Wheel-Trans buses are estimated to have a reduced fuel and maintenance cost of \$4,500/vehicle/year versus the 2017 diesel baseline.
Other benefits	 Improved drivability in the city. Continued operation of the Community Bus Program. Vehicle size meets ridership target. Meets or exceeds all requirements laid out in CSA Standard D409-16 for accessible vehicles.

Pilot Program to introduce smaller Electric Vehicles into the Wheel-Trans Fleet

The goal of the Wheel-Trans 10-Year Strategy is to help make the TTC more accessible, equitable, inclusive, and sustainable for existing and future customers. The strategy contains several initiatives, one of which is Fleet Replacement. Over the years, Wheel-Trans has diversified its fleet mix to match new customer profiles, trip patterns, and travel behaviour, resulting in improved ride comfort and vehicle reliability, reduced Greenhouse Gas (GHG) emissions, and reduced fuel consumption.

Following a recent study to understand the profile of Wheel-Trans customers, it was noted that 80% of the customer base are defined as 'Ambulatory in mobility', meaning they do not require paratransit buses. As a result of this, the TTC is exploring the introduction of smaller electric vehicles to the Wheel-Trans fleet, likely sedans or SUVs, in order to optimize the fleet mix, vehicle usage and ultimately enhance Wheel-Trans operations.

A proposed implementation strategy for introducing these smaller vehicles into the Wheel-Trans fleet will include the following:

- Procurement of up to 10 smaller electric vehicles in 2026 to begin a pilot program.
- The pilot will last approximately 12 months, where the vehicles will be evaluated for suitability in Wheel-Trans service and assessed against certain criteria, including Vehicle Accessibility, Customer Experience, Operator Experience, Charging, and Vehicle Technical Performance.

• The results of the pilot and lessons learned will inform fleet planning and bulk procurement.

Some anticipated benefits of this initiative include the following:

- Advancement of the TTC's and the City's fleet electrification and greenhouse gas emission targets.
- Potential savings in the capital cost of procuring assets.
- Potential savings in fuel and maintenance costs.
- Meeting customer demand growth.
- Improved service and direct service trips.
- Improved customer experience and ride quality through smoother, more comfortable and quieter rides.

The eight charge points being installed at Lakeshore Garage in Q3 2025 for the pilot battery-electric Wheel-Trans buses, as well as the City's non-revenue vehicle charging infrastructure network, will support vehicle charging for the pilot units.

The vehicles will be procured through a competitive process, in consultation with all relevant internal TTC stakeholders and externally with ACAT. On June 11, 2025, preliminary engagement was held with the ACAT Wheel-Trans Operations Subcommittee to introduce this and advise planned next steps. Delivery of vehicles is planned for 2026, and staff will report back to the Board with the results of the pilot program in 2027.

Contact

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Signature

Bem Case Executive Director – Innovation and Sustainability

Attachments

Attachment 1 – Confidential Information

Attachment 2 – Decision History

Attachment 3 – Approved 2025 Wheel-Trans Fleet Plan

Attachment 2 – Decision History

February 25, 2020 – the TTC Board authorized the procurement of 20 six-metre Wheel-Trans buses; one seven-metre Wheel-Trans bus for the purpose of a pilot bus; and 90 seven-metre buses following approval by ACAT.

Decision: Procurement Authorization – Purchase of Wheel-Trans Buses

October 22, 2020 – the TTC Board delegated authority to the TTC Chief Executive Officer to issue a contract change through Metrolinx's Joint Procurement Initiative to Creative Carriage Ltd. for the supply and delivery of approximately 70 Wheel-Trans buses at an estimated cost of \$20 million, inclusive of all project delivery costs.

Decision: TTC Fleet Procurement Strategy and Plan

July 14, 2022 – the TTC Board received a report containing updates and next steps on the Green Bus and Green Wheel-Trans Bus programs.

Decision: Green Bus and Wheel-Trans Green Bus Program Update

May 8, 2023 – the TTC Board authorized a contract amendment for the procurement of 52 six-metre gasoline Wheel-Trans buses; and received an update regarding the TTC's Green bus transition strategy.

Decision: Green Bus WT Program – Procurement Amendment Authorization

February 24, 2025 – the TTC Board authorized a contract award for the supply of five battery-electric paratransit buses to Damera Bus Sales Canada Corporation at a total cost of \$5.5 million.

Decision: Procurement of Battery-Electric Pilot Buses

Attachment 3 – Approved 2025 Wheel-Trans Fleet Plan

The 2025 budget-approved Wheel-Trans Fleet Plan is excerpted below to show the vehicle retirements and procurements over the next five years (2026-2030).

Table 4: Section of approved 2025 Wheel-Trans Fleet Plan

Retirements							
Vehicle Model	2025	2026	2027	2028	2029	2030	Total
7m Gasoline ProMaster				62	55	21	138
6m Gasoline ProMaster	30	22	14		23	24	113
Procurements							
Vehicle Model	2025	2026	2027	2028	2029	2030	Total
7m Gasoline ProMaster		5**		40**	5**		50
6m Gasoline ProMaster	38*	20**	12**	18**	5**		93
				4.0	70	40	100
Battery-Electric		5*		12	70	46	133

^{**} To be procured through this report (105 in total).

With the last gasoline vehicle to be delivered in 2029, and the continued steady-state procurement of battery-electric paratransit buses, a fully electrified fleet is expected by 2036 after the last set of gasoline vehicles has reached end-of-life.

The TTC continues to update the Wheel-Trans Fleet Plan annually. Future plans may reflect changes in fleet mix in terms of vehicle size, pending the results of the pilot for the smaller electric vehicles.