



Procurement Authorization – Supply of Cummins Factory- Manufactured Engines for the 2025 Bus Rebuild Program

Date: July 17, 2024
To: TTC Board
From: Chief Financial Officer

Summary

The TTC's current fleet of more than 2,000 buses plays a significant role in keeping Toronto moving, and proactive bus maintenance programs ensure that buses continue to offer safe and reliable transportation for TTC customers. Over the course of its 13-year life, the average TTC bus will travel one million kilometres. To maximize reliability and the lifespan of its fleet, the TTC completely overhauls every bus at its midpoint of six years; the scope of this work ranges from rebuilding the engine and transmission, to replacing panels and repainting the exterior, to refurbishing flooring and seats.

The purpose of this report is to obtain the TTC Board's approval to award a contract to City View Bus Sales and Service Ltd. in the amount of \$11,822,868.09, inclusive of taxes, for the supply of 170 Cummins factory-manufactured engines. The 170 engines acquired through this procurement will be used for the 2025 Bus Rebuild Program covering the overhaul of 114 Nova diesel buses and 56 Nova hybrid buses.

TTC Board approval is required as this contract award exceeds the Chief Executive Officer's delegated authority limit of \$5 million for the award of contracts for budgeted goods and services.

Recommendations

It is recommended that the TTC Board:

1. Authorize the contract award to City View Bus Sales and Service Ltd. in the amount of \$11,822,868.09 (inclusive of HST and core charges) for the supply of 170 Cummins factory-manufactured engines for the TTC's Nova 12-metre (40-foot) buses on the basis of the lowest-priced compliant bid received.

Financial Summary

Based on the expected deliveries, Table 1 below summarizes the annual expenditure forecast over the contract term:

Table 1 – Capital Expenditure Forecast (\$000s)

	2024 Forecast	2025 Forecast	Total Contract Amount
Engine Deliveries	19	151	170
Requested Contract Authority (with HST)	1,464	10,359	11,823
Core Credits	-	(1,233)	(1,233)
Requested Contract Authority (Net of Core Credits)	1,464	9,126	10,590
Requested Contract Authority (without HST)	1,295	8,076	9,371
Non Rebatable HST 1.76%	23	142	165
Total Contract Expense	1,318	8,218	9,536
Rebatable HST	146	908	1,054
Total Authority, including HST	1,464	9,126	10,590

All 170 Cummins manufactured engines acquired through this procurement will be used for bus overhauls scheduled to be completed in 2025. The 170 engines will be delivered in 2024 and 2025 to meet the rebuild production schedule.

The recommended contract includes rebatable HST and core charges. The TTC is eligible for a core credit, as cores from replaced engines are returned to City View Bus Sales and Service Ltd. The return of cores from replaced engines and the subsequent issuing of credits to the TTC is expected to occur in 2025.

Funds for this contract expenditure are included in the TTC's 2024-2033 Capital Budget and Plan under Program 4.13, Bus Rebuild Program which was approved by the TTC Board at its meeting on December 20, 2023 and approved by City Council on February 14, 2024.

The 10-Year Capital Budget and Plan includes a total of \$537.2 million in approved funding for the Bus Rebuild Program, including \$64.0 million budgeted to be spent in 2024 and an additional \$31.0 million in 2025, as outlined in Table 2 below.

Table 2 – Bus Rebuild Program - 2024-2033 Capital Budget and Plan Summary (\$000s)

Project Name	2024 Budget	2025	2026	2027	2028	2029-2033	10-Year Total
Bus Rebuild Program	63,951.6	30,968.4	5,564.9	1,963.8	46,862.9	387,913.9	537,225.5

Equity/Accessibility Matters

A cornerstone of the TTC’s 2024-2028 Corporate Plan is accessibility, and as a proud leader in providing accessible public transit to the residents of Toronto and surrounding municipalities, the TTC is committed to ensuring reliable, safe, accessible and inclusive transit services for all of its customers. The engines being recommended for award under this contract will ensure that the TTC can continue to offer reliable, safe, accessible, and inclusive transit services for all customers.

Decision History

The TTC Board approves the procurement of engines for the annual Bus Rebuild Program. Most recently at its meeting on July 12, 2023, the TTC Board authorized the award of a contract to City View Bus Sales and Service Ltd. for the supply of 153 Cummins factory-remanufactured engines for the TTC’s Nova 12-metre buses. These engines were required for the 2024 Bus Rebuild Program.

Report: July 12, 2023 – [Procurement Authorization – Supply of Cummins Factory-Remanufactured Engines](#)

Staff are continuing to work with the supplier community to establish multiyear contracts for the supply of engines in the Bus Rebuild Program in lieu of annual contracts.

Issue Background

The TTC performs annual bus midlife overhauls at its Duncan and Harvey shops. This includes replacement of the engine assembly. In 2025, the TTC plans to overhaul 170 Nova 12-metre buses and requires 170 engines for this work.

The procurement of new and remanufactured engines from the Original Equipment Manufacturer (OEM) come complete with a two-year warranty on parts and labour which provides a high level of reliability on the overhauled buses. Going forward, the need for Cummins engines will diminish and eventually will no longer be a requirement for the TTC’s bus fleet. By 2040 or sooner, the TTC will transition its bus fleet to zero-emissions. This plan is aligned with the City of Toronto’s TransformTO Net Zero Strategy and the C40 Fossil-Fuel-Free Streets Declaration. As part of the TTC’s Green Bus Program, the TTC procured its last order of 336 hybrid-electric buses for delivery in 2023 and 2024. In January 2023, the TTC commenced its steady-state procurement of only zero-emissions, battery-electric buses with the award of 340 eBuses for delivery in 2024 and 2025.

Comments

To ensure the reliability and performance of the TTC's 12-metre/40-foot Nova buses as part of the upcoming 2025 Bus Rebuild Program, a procurement process was initiated to secure the necessary engines.

A Request for Bids (RFB) was publicly advertised on the MERX website for the supply of 170 Cummins factory-manufactured engines (TTC part number 080772, Cummins part number DR7782RX - Qty 114 for clean diesel buses, and TTC part number 082240, Cummins part number DR8741NX - Qty 56 for hybrid buses) to be utilized in the TTC's Nova 12-metre bus rebuild project in 2025).

Eleven companies were notified of the RFB, in addition to the advertisement on the MERX website on April 24, 2024. Seven out of the 11 companies that were included in the distribution list and notified of the RFB downloaded the bid documents from MERX, and five companies submitted a bid. Four companies outside the distribution list downloaded the bid documents but did not submit a bid. The bid results are listed in Appendix A.

Of the 170 engines being recommended for award, 114 are considered remanufactured (or reconditioned/exchanged), and the other 56 engines are considered new. When purchasing a remanufactured item, a damaged or worn unit (a core) is required by the applicable vendor. The vendor will in turn supply a remanufactured unit. If the TTC does not have a core to supply to the vendor, an additional core charge will be applied, although the TTC will have 365 days to provide a core. Cummins does not currently offer remanufactured engines for the hybrid buses, hence 56 engines are considered new, although the core program applies to both engine types.

The RFB required Bidders to quote a core price for the engine, but stated that the TTC would return cores to the vendor under the same purchase order at a later date (within 365 days) for core credit at the quoted core charge.

As the TTC currently does not have any cores on hand to supply to the vendor, the core charges will initially apply. These charges have been factored into the total recommended award value and the bid totals, as detailed in the attached Appendix A. The TTC anticipates returning 170 engine cores in good, rebuildable condition to the vendor within 365 days for core credits, which will result in 100% reimbursement of the initial core charges.

Consequently, the bid evaluation and determination of the lowest-priced bid is based on the Bidder's submitted pricing for the engine unit alone, irrespective of the core charges quoted. The RFB also requested the Bidder to propose financial incentives based on prompt payment discounts, only one Bidder offered a prompt payment discount as noted below.

Excluding core charges, for which a credit is expected, City View Bus Sales and Service Ltd. (City View) submitted the lowest total bid amount of \$10,589,379.97, inclusive of HST, and complies with the TTC's requested delivery schedule. City View offered a 0.5% discount if the invoices are paid within 15 days. It should be noted that if the core charges

had been included in the evaluation, the recommended company would still be the same. City View is therefore recommended for award of this contract.

A price comparison with the last buy price of the recommended engines was conducted and revealed the following:

- TTC part number 080772 – 10.93% increase since the last buy price where 153 units were purchased from City View on July 21, 2023.
- TTC part number 082240 – 4.67% increase since the last buy price where 20 units were purchased from Wajax Limited on June 13, 2023.

The price increase compared to the previous price is mainly attributed to the following key factors:

- Fuel prices based on the Ministry of Transportation (MTO) fuel price index increased by 10.37% between July 2023 and April 2024.
- Producer Price Index for Automotive Parts, Accessories and Tire Retailers has increased by 1.88% between July 2023 and April 2024 (latest available data).
- Depreciation of Canadian dollar by 2.65% from July 2023 to May 2024, these engines will be purchased in U.S. dollars by the recommended Bidder and sold to TTC in Canadian dollars; hence, the Bidder's price includes some provision for currency fluctuation. It is forecasted that the Canadian dollar will trade at 1.42 CAD/USD by Q4 2024, which represents a further depreciation by approximately 3.38% based on RBC banks Capital Market Report (<https://www.rbccm.com/assets/rbccm/docs/fx/currency-report-card.pdf>).

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Signature

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Attachments

Appendix A – Supply of Cummins Factory-Manufactured Engines for the 2025 Bus Rebuild Program

Appendix A

Supply of Cummins Factory-Manufactured Engines for the 2025 Bus Rebuild Program				
Bidder Name	Total Quoted Value for 170 Engines (including HST) (A)	Core Charges for 170 Engines (including HST) (B)	Total (including HST and core charges) (C=A+B)	Total Recommended Value (including HST and core charges)
City View Bus Sales and Service Ltd.	\$10,589,379.97	\$1,233,488.11	\$11,822,868.09	\$11,822,868.09
Tokmakjian Inc. dba TOK Performance	\$10,638,940.10	\$1,233,488.11	\$11,872,428.21	-
Wajax Limited	\$10,971,697.35	\$1,233,488.11	\$12,205,185.46	-
Mississauga Bus, Coach & Truck Repairs Inc.	\$11,830,626.85	\$1,295,162.52	\$13,125,789.37	-
Brandt Tractor Ltd. – Truck & Trailer	\$12,603,626.51	\$1,233,488.11	\$13,837,114.62	-
TOTAL				\$11,822,868.09