For Action

Procurement Authorization – Supply of 88 Cargo Vans for Non-Revenue Fleet

Date: February 28, 2023
To: TTC Board
From: Chief Transportation and Vehicles Officer

Summary

The purpose of this report is to obtain authorization from the TTC Board to award the procurement of up to 88 cargo vans to 2281610 ONT INC O/A Ford Downtown/Lincoln Downtown (Downtown Automotive Group) in the total upset limit amount of $7,740,900 inclusive of HST on the basis of the lowest total evaluated bid price.

The contract will be fulfilled over the period of two years and is part of the TTC's regular Non-Revenue Vehicles Fleet Plan for end of life replacements and growth.

Recommendations

It is recommended that the TTC Board:

1. Authorize the contract award to 2281610 ONT INC O/A Ford Downtown/Lincoln Downtown (Downtown Automotive Group) in the total upset limit amount of $7,740,900 (inclusive of HST) for the supply of up to 88 cargo vans on the basis of lowest total evaluated bid price, for a contract term of two years, commencing upon notification of award.

Financial Summary

Funds for this expenditure are included in the TTC's 2023-2032 Capital Budget and Plan under Program 4.21 Purchase of Non-Revenue Vehicles which was approved by the TTC Board at its meeting on January 9, 2023 and by City Council on February 15, 2023.

The 10-year Capital Plan includes a total of $77.8 million for the purchase of Non-Revenue Vehicles comprising of cashflow funding as follows:

Project Name	2023 Budget	2024	2025	2026	2027	2028	2029	2030	2031	2032	10-Year Total
Purchase of Non-Revenue Vehicles	$0										
	9,482	16,803	17,967	18,128	2,680	2,678	2,701	2,705	2,706	1,940	77,791

The requested upset limit amount of $7,740,900, inclusive of HST, is based on a lowest price qualified bid of $7,017,997.15 for the supply of up to 88 cargo vans, planned factory features of approximately $62,902.85 and a contingency of $660,000.

Based on the planned delivery schedule, the contract expenditures will be incurred over 2023 and 2024 and will require the following cash flow funding:

Expected Delivery Year	2023	2024	Contract Total
Number of Units	46	42	88
Total Upset Limit	$3,950,000	$3,790,900	$7,740,900
Rebateable HST	($392,900)	($377,100)	($770,000)
Net financial impact (net of rebateable HST)	$3,557,100	$3,413,800	$6,970,900

The recommended contract enables the TTC to procure five configurations of cargo vans: low roof two seater; low roof five seater; high roof two seater; high roof five seater; and high roof 12 seater. Each configuration differs in pricing and will address variations in operational requirements throughout the TTC. Part of the contingency of $660,000 may be used to substitute one configuration for another in the event a configuration is not available and to address emerging business requirements related to technology, maintenance tooling and adjustments to diagnostic and interfacing tools. This is part of the risk management plan, and informed by experience with recent supply chain issues.

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

Equity/Accessibility Matters

A cornerstone of the TTC's current Corporate Plan 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.

The Non-Revenue Vehicles engineering team consulted with every user group and operator for the cargo vans. The accessibility challenges faced by all users were considered and addressed. Non-Revenue Vehicles engineering follows the SAE standard for vehicle accessibility and ergonomics, ensuring the vehicles are suitable for the 95th percentile of humans.

The bid was open to the public, with equal opportunity for all vendors to bid competitively.

Decision History

The replacement cycle of cargo vans is driven by the Non-Revenue Vehicles Fleet Plan, with the goal to replace vehicles and equipment according to a prescribed life cycle. The cargo vans being replaced in this procurement are over their prescribed lifecycle age. The most recent procurement of cargo vans was awarded in 2019. A total of 76 cargo vans in five configurations were awarded to three separate bidders, and the completed units were delivered in the period between 2019 and 2021. The previous cargo van procurement did not require TTC Board approval as the total award amount was below $5,000,000 for each vendor.

Issue Background

Cargo vans are the single largest fleet of non-revenue vehicles within the TTC, totaling 183 units (29%) out of a total fleet of 633 vehicles in service as of year 2022, with a forecasted growth to approximately 250 units by 2030. Cargo vans are the most versatile vehicle in the fleet, being relatively easy to drive within the city, transporting crews of two to five employees while providing ample payload and secured storage space for equipment and tools. Trade groups such as carpenters, plumbers, and mechanics transport material such as long conduit and lumber, job boxes, tools, and portable equipment such as table saws and welders to remote job sites. Additional upfitting of the vehicle may add workbenches and shelving for groups that need a mobile work space. General operations such as Closures and Diversions, IT Services, Communications and Radio shops also use the vehicle to transport crews between TTC sites, with the ability to transport larger items such as consoles or signage when the need arises.

Based on historical data collected from previous fleets, the typical life cycle of a cargo van is estimated to be seven years, where it typically accumulates approximately 100,000 kilometres or more. Currently, the average age of a cargo van within the TTC fleet is approximately 7.5 years, with 41% (75 units) of the fleet now beyond its design life cycle. This has resulted in operational challenges such as increased downtimes due to increased vehicle maintenance and repairs. It has also resulted in an ongoing requirement for renting vehicles.

Beyond the tracking of the vehicle age and mileage, non-revenue maintenance staff also perform condition assessments yearly to determine if the vehicle should be replaced early, or if it can be extended past its design life. This condition assessment also serves to determine if any of the vehicles are meeting expected mileages according to vehicle age, to ensure all vehicles are properly utilized. Due to the large number of vehicles at/or beyond their life cycle and in poor condition, these vehicles are recommended for replacement. The purchase of new cargo vans is part of a maintenance strategy to update the existing non-revenue fleet, thereby reducing the average fleet age.

Through current stakeholder requirements, the current fleet size is also insufficient to support operational activities and vehicle maintenance requirements. Similar to the revenue fleet of vehicles, a proper maintenance spare ratio is required to ensure

preventative maintenance programs are completed on time. This will help maximize vehicle availability and reliability for TTC's internal stakeholders. The introduction of a proper maintenance spare ratio is in line with industry best practice for asset management.

The shortfall of vehicles needed for operational activities and for a proper maintenance spare ratio is currently offset by rental vehicles. The use of rentals was raised by the Auditor General and it was recommended that it would be more effective to purchase a vehicle instead of renting long term. This procurement includes 13 additional units to increase the fleet size, establish a proper maintenance spare ratio and to help reduce the number of rentals.

Comments

A Request for Bid (RFB) was publicly advertised on the TTC MERX and TTC Bonfire websites, with the RFB document posted on the TTC Bonfire website. Five (5) companies' downloaded copies of the bid documents out of which two (2) companies submitted a bid as summarized on the attached spreadsheet entitled, Appendix A, Bid Summary.

Bidders were required to submit a bid based on the supply of up to 88 cargo vans, comprising of five (5) different types of configurations (as noted below), over a two (2) year period.

i. Configuration 1: Low roof, one row seating
   (Estimated quantity of 11 vehicles)
ii. Configuration 2: Low roof, two row seating, low roof crew van
   (Estimated quantity of 20 vehicles)
iii. Configuration 3: High roof, one row seating
   (Estimated quantity of 15 vehicles)
iv. Configuration 4: High roof, two row seating, high roof crew van
   (Estimated quantity of 39 vehicles)
v. Configuration 5: High roof, four row seating, passenger van
   (Estimated quantity of 3 vehicles)

Additionally, Bidders had the option to submit pricing based on a list of factory features, also referenced as optional items in the bid document which could be added onto the vehicle configuration. These factory features include heated mirrors, winter floor mats, speed limiting systems, towing packages, *etc*. The pricing for the list of options was not a mandatory requirement to be completed by the bidders.

The RFB document included a list of mandatory technical requirements to be completed and submitted by bidders, by indicating "YES" or "NO" for each specified item. All bids were required to meet the mandatory technical requirements in order to be considered compliant. Failure to meet the technical requirements would deem the bid submission non-compliant and the bid submission would not be evaluated further. Only compliant bids would proceed to the next stage; opening of the price schedule.

The pricing component for each bid would then be reviewed to determine the lowest total evaluated bid price (inclusive of HST) for each of the configurations. It was stated in the RFB document that TTC intended to award up to five contracts on the basis of lowest evaluated bid price.

Bids were received from Downtown Auto Group and East Court Ford Lincoln (East Court). Both bids were reviewed for commercial and technical compliancy and both bids were determined to be compliant.

Downtown Auto Group submitted the lowest-priced bid for all five configurations, and submitted pricing on the factory features. Its bid did not state any exceptions or qualifications. Downtown Auto Group has satisfactorily completed work of a similar size and nature for the TTC in the past. Its bid is recommended for award.

East Court submitted the second lowest priced bid and did not state any exceptions or qualifications. Its bid is not recommended for award.

The recommended upset limit amount of $7,740,900 includes the supply of up to 88 cargo vans (based on the configurations 1 through 5), factory features in the amount $62,902.85, and a contingency of $660,000.

Innovation and Sustainability

The TTC has committed to the electrification of both its revenue and non-revenue fleets by 2040, in line with the City of Toronto's TransformTO Net Zero Strategy.

Green Revenue Vehicles

Reports on the transition to zero-emissions conventional and Wheel-Trans revenue buses will continue through established TTC Green Bus Program updates.

Green Non-Revenue Vehicles

The over 1,100 assets that make up the non-revenue fleet of rail and automotive vehicles is comprised of approximately 20 different vehicle types. TTC will begin transitioning these assets to zero-emissions as the market begins to offer all-electric options.

With regards to cargo vans specifically, this procurement of gas-powered vans is required to replace assets at the end of their useful life and to ensure the continuity of the operations they support. In parallel to this procurement, however, the TTC will be issuing an RFP to procure a pilot of approximately five (5) all-electric vans to be delivered by Q1/Q2 of 2024. Further, PowerON Energy Solutions (a subsidiary of OPG) is being engaged to install the required electrification infrastructure for these vans and to get ahead of future electric non-revenue vehicles.

The cost of the pilot, for both vehicles and infrastructure, is fully funded through the 2023 Capital Budget and Plan.

Contact

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Signature

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Attachments

Attachment 1 – Appendix A – Bid Summary
Attachment 2 – Appendix B – Current Cargo Van Status

Appendix 'A' – Bid Summary

Supply of Cargo Vans

Bid Summary

Configuration	Quantity	Description	2281610 ONT INC O/A Ford Downtown/Lincoln Downtown (Downtown Automotive) *	East Court Metro Ford Lincoln Sales Ltd. (East Court)
1	11	Total evaluated bid price (including HST)	$817,694.69	$944,079.43
2	20	Total evaluated bid price (including HST)	$1,564,186.21	$1,789,600.96
3	15	Total evaluated bid price (including HST)	$1,179,130.50	$1,356,969.82
4	39	Total evaluated bid price (including HST)	$3,199,637.60	$3,646,863.27
5	3	Total evaluated bid price (including HST)	$257,348.15	$289,449.12
Total	88		$7,017,997.15	$8,026,962.60

* Recommended for award

Note: The total pricing above excludes factory features and contingencies

Appendix 'B' – Current Cargo Van Status

Supply of Cargo Vans

Current Cargo Van Status

No.	Vehicle #	User Group	Age	KM	Status	Impact / Justification
1	67	Cable Shop	6	256363	Replacement	Transporting work crews, job boxes, tools and parts, cable spools for repairs and upgrades
2	261		12	141911	Replacement	
3	262		12	118998	Replacement	
4	263		12	118998	Replacement	
5	264		12	74796	Replacement	
6	553		9	100249	Replacement	
7	554		9	123854	Replacement	
8	561		9	97083	Replacement	
9	571		9	136252	Replacement	
10	236	Carpenters	12	191737	Replacement	Transporting work crews, job boxes, tools and parts, lumber
11	399		12	109419	Replacement	
12	New	Closures and Diversions	N/A		Addition/Growth	Transporting work crews, signage, cordons to support subway closures
13	New		N/A		Addition/Growth	
14	584	Customer Experience	13	107827	Replacement	Support special events
15	237	Electrical Services	12	313029	Replacement	Building repairs
16	545	Emergency Equipment	9	40378	Replacement	Transporting work crews, job boxes, tools and parts
17	546		9	18495	Replacement	
18	551		9	23750	Replacement	
19	837		12	103328	Replacement	
20	838		12	61600	Replacement	
21	New	End Terminal Cleaning	N/A		Addition/Growth	Transporting work crews, job boxes, tools and parts, cleaning equipment
22	396	Fire Prevention	12	132436	Replacement	Transporting work crews, job boxes, tools and parts
23	397		12	140706	Replacement	
24	398		12	171645	Replacement	
25	415		12	134958	Replacement	
26	538		9	102068	Replacement	
27	778		N/A	120801	Decommissioned	

No.	Vehicle #	User Group	Age	KM	Status	Impact / Justification
28	282	Greenwood Shop	12	115638	Replacement	Shop vehicle
29	427	Miscellaneous Trades	12	202567	Replacement	Building repairs
30	288	HVAC	12	76923	Replacement	Transporting work crews, job boxes, tools and parts for HVAC repairs in Subway and TTC Buildings
31	289		12	68279	Replacement	
32	393		12	82309	Replacement	
33	394		12	80804	Replacement	
34	412		12	77504	Replacement	
35	413		12	46381	Replacement	
36	549		9	81041	Replacement	
37	719	Millwrights	12	119537	Replacement	Shop equipment repair
38	835		12	52700	Replacement	
39	New	Network Services	N/A		Addition/Growth	Transporting work crews, laptops, consoles, equipment for IT services
40	New		N/A		Addition/Growth	
41	New	Non-Revenue Vehicles	N/A		Spare	Spare vehicles to loan to user groups when vehicles are brought in for maintenance and yearly inspections
42	New		N/A		Spare	
43	New		N/A		Spare	
44	New		N/A		Spare	
45	New		N/A		Spare	
46	402	North Zone Truck Wilson	12	27450	Replacement	Parts delivery
47	421	Operation Training Centre	9	37467	Replacement	Driver training
48	947	Paint & Sign Shop	9	142240	Replacement	Transporting work crews, job boxes, bus poles, large posters
49	948		9	117118	Replacement	
50	895		12	123126	Replacement	
51	284		12	133162	Replacement	
52	286	Plumbers	12	256194	Replacement	Transporting work crews, job boxes, tools and parts
53	287		12	181203	Replacement	
54	411		12	147561	Replacement	
55	488		9	142777	Replacement	
56	559		9	80126	Replacement	
57	E285		17	144514	Decommissioned	
58	265	Radio Shops	12	85020	Replacement	Transporting work crews, job boxes, tools and parts, radio equipment for installations within all of TTC
59	269		12	121343	Replacement	
60	408		9	94085	Replacement	
61	490		9	219522	Replacement	
62	E284		17	110515	Replacement	

No.	Vehicle #	User Group	Age	KM	Status	Impact / Justification
63	209		12	200414	Replacement	
64	367	Repair Shop	12	94248	Replacement	Transporting work crews, job boxes, tools and parts. Mobile enclosed workbench.
65	409		12	105079	Replacement	
66	424		12	77144	Replacement	
67	575		9	88222	Replacement	
68	283	RSEM	12	81203	Replacement	Transporting work crews, keys and locks
69	407		9	116707	Replacement	
70	587		17	197183	Decommissioned	
71	207	Signals	12	84342	Replacement	Transporting work crews, job boxes, tools and parts, radio equipment for Subway signal upgrades
72	235		12	116519	Replacement	
73	417		12	73715	Decommissioned	
74	525		9	163817	Replacement	
75	379	Substations & Power Control	12	136440	Replacement	Transporting work crews, job boxes, tools and parts
76	395		12	133705	Replacement	
77	400		12	98114	Replacement	
78	520		9	247975	Replacement	
79	260	Subway Wiring & Service	12	163817	Replacement	Transporting work crews, job boxes, tools and parts. Mobile enclosed workbench.
80	405		12	166380	Replacement	
81	891		12	130983	Replacement	
82	280	Track & Structures	12	239951	Decommissioned	Transporting work crews, job boxes, tools and parts. Mobile enclosed workbench.
83	New		N/A		Addition/Growth	
84	New		N/A		Addition/Growth	
85	New		N/A		Addition/Growth	
86	404		9	57239	Replacement	
87	281		12	259533	Replacement	
88	482		9	131811	Replacement	