City of Mississauga

Corporate Report



Date: January 3, 2023

To: Chair and Members of General Committee

From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

Originator's files:

Meeting date: January 25, 2023

Subject

Transportation and Works – 2023 Electric Vehicle Procurement

Recommendation

- 1. That the report entitled "Transportation and Works 2023 Electric Vehicle Procurement" dated January 3, 2023 from the Commissioner of Transportation and Works be approved.
- 2. That the Chief Procurement Officer or designate be authorized to execute contracts with various suppliers for the supply and delivery of new and/or lightly used electric vehicles as they become available for the period ending December 31, 2023, notwithstanding that each contract may exceed \$100,000 and would normally require Council approval.
- 3. That the MiWay funds of \$990,000 be pre-authorized ahead of the 2023 Business Plan and Budget approval. In addition, funds of \$1,185,000 be pre-authorized ahead of the 2024 Business Plan and Budget approval to allow the procurement of new or lightly used electric vehicles as outlined in the Corporate Report dated January 3, 2023 entitled "Transportation and Works 2023 Electric Vehicle Procurement"

Executive Summary

- With the City's commitment to reduce greenhouse gas emissions from fleet vehicles and with the recent and successful installation of the electric vehicle (EV) chargers for fleet use, the City is committed to purchasing EVs.
- As part of the regular replacement cycle, MiWay plans to replace up to (36) gas vehicles with EVs, and Corporate Fleet plans to replace up to (20) gas vehicles with EVs in 2023 and 2024.
- In April 2022, MiWay issued an RFT procurement for the Supply & Delivery of (3) EVs, however no bids were received. Due to supply issues, the availability of EVs has been significantly impacted and has created long wait times. MiWay and Corporate Fleet are requesting approval to pre-authorize funding to purchase new and/or lightly used EVs as

they become available on the market. This includes advancing the funds from the 2023 and 2024 Capital Budget, and authorizing the Chief Procurement Officer or designate to issue contracts to purchase new and/or lightly used EVs as they become available on the market. Individual awards will be in accordance with typical approvals and contract execution processes.

Background

Climate Change Action Plan

The Climate Change Action Plan was approved in 2019 and calls for the City to significantly reduce it's greenhouse gas (GHG) to meet a 40% GHG reduction by 2030 and an 80% reduction by 2050. As Transit is the most significant source of GHGs corporately (approx. 70%), the electrification of the MiWay fleet for both revenue and non-revenue is critical to meet these targets. In addition, the Corporate Green Fleet and Equipment Policy, which was approved in 2020, prioritizes investment in low and zero emissions fleet, equipment and infrastructure. The accompanied Electric Vehicle Charging Station Standard to this policy guides the installation of electric vehicle chargers on City property.

In 2022, MiWay and Corporate Fleet worked with the Environment Section and Facilities and Property Management to successfully install EV charging stations to facilitate the transition of gas-powered vehicles to zero-emission vehicles. MiWay installed charging stations at the Malton Transit Garage to allow for (6) charging connectors for Change Off vehicles. MiWay also installed EV charging connectors at the Central Parkway Transit Garage to allow for (43) charging connectors used for Change Offs, Route Supervisors, and Infrastructure Vehicles. This is in addition to the existing (10) connectors that were previously installed at this location in 2019. Corporate Fleet installed (10) charging connectors at the Mavis facility in 2022.

MiWay currently owns and operates seven (7) Nissan Leaf EVs and three (3) Chevrolet Bolt EVs used for Change Offs and is looking to grow this number. Corporate Fleet owns (10) Mitsubishi Outlander Plug-in Hybrid-Electric Vehicles (PHEV) that were purchased in 2018. As the City transitions away from traditional gas-powered vehicles to electric vehicles, it is important to coordinate the timing of the vehicle replacement needs with the supporting EV infrastructure. The installation of these new EV chargers has been deliberately timed to accommodate the purchase of electric vehicles for MiWay and Corporate Fleet needs.

Electric Vehicle Supply Challenges

In April 2022, MiWay issued an RFT procurement (PRC003420) for the Supply & Delivery of (3) EVs, however no bids were received. Corporate Fleet also issued and received bids for a full electric pickup (PRC003157) and issued a PO, however the manufacturer cancelled the order before the vehicle could be built due to manufacturing availability. After consultation with

prospective dealers, it was discovered that this was largely due to the lack of EV availability. Short supply of EVs in the Ontario market are attributed to a number of factors including uptick in EV purchases, supply chain issues (such as global semiconductor chip shortage and global parts shortages), and auto manufacturers prioritizing and sending their vehicles to jurisdictions that have significant provincial EV incentives (e.g. British Columbia and Quebec).

While supply of EVs have been a challenge, the demand for EV vehicles has also increased due to many factors including rising gasoline and diesel costs. Most EV dealers expect that the supply shortage will not recover for at least another two (2) years, at the earliest. Mississauga is not alone in experiencing procurement challenges when trying to electrify the fleet as the majority of public agencies are having similar struggles.

As per market research and benchmarking EV procurements across Municipalities across Ontario, dealers may bid to supply new vehicles, however the delivery timelines are unknown and unpredictable. MiWay and Corporate Fleet have experienced this issue in other recent fleet procurements.

Both Transit Services and Corporate Fleet provide an essential service. Transit support vehicles enable a safe and efficient transit system in Mississauga and Corporate Fleet vehicles are used by various departments all across the City. As the existing vehicles begin to age and their replacements are delayed, service is, and will continued to be, impacted. While we wait for EVs to become available when market situation allows, MiWay and Corporate Fleet requires the authorization to single source purchase new or lightly used EVs.

Comments

EV Procurement

MiWay is planning to purchase (36) EVs in 2023 and 2024, and are requesting that \$2,175,000 be pre-authorized ahead of the 2023 and 2024 Capital Budget, to allow the 2023 and 2024 procurement of EV Fleet. Corporate Fleet has already received approval to advance the funds as per the "2023 Advance Capital Project Approval" Corporate Report dated November 30, 2022.

Due to the limited EV supply on the market, MiWay and Corporate Fleet are also considering procuring lightly used EVs that still meet all applicable technical specifications (e.g. age, model, battery range, mileage, front wheel or all wheel drive, etc.) and are in good physical condition. Based on conversations with a local, authorized used EV dealer, each purchase can be evaluated on a case-by-case basis without any financial implication.

Given the City's commitment to climate action and the recent installation of the EV chargers, MiWay and Corporate Fleet intends to continue to replace gas or diesel powered vehicles at

their end of life with EVs, with acceptable and equivalent models that are available on the market. The last gas-powered vehicle purchased by MiWay was in 2019.

Single-Sourcing EVs

MiWay and Corporate Fleet are requesting approval to single-source and purchase EVs as they become available on the market, due to limited supply and staff need to act quickly to secure supply. MiWay and Corporate Fleet have done some initial market scans and found that there are situations where some dealers may have stock of EVs, but since they are in high demand, these EVs are usually sold quickly and well before we are able to initiate a procurement process. Creating the ability to single-source EVs would allow MiWay and Corporate Fleet to save staff time and have a greater chance in securing EVs in the event that EVs become available on the market for purchase.

The Procurement By-law # 0013-2022 requires Council approval for single source contract awards with a value of more than \$100,000. This request is for authority for the Chief Procurement Officer or designate to execute contracts for EVs on a single source basis to promptly secure supply for the period ending December 31, 2023, notwithstanding that each contract may exceed \$100,000.00 and would normally require Council approval.

Strategic Plan

The purchase of EVs would contribute to two strategic goals: **Move** (Develop Environmental Responsibility) and **Green** (Lead and Encourage Environmentally Responsible Approaches). Mississauga has been proactive in sustainability and climate change governance for over two decades. More recently, the purchase of EVs supports the City's Climate Change Action Plan and the Corporate Green Fleet and Equipment Policy.

Financial Impact

Total funding of \$2,175,000 is being requested to be pre-authorized ahead of budget approvals to start the procurement process for EVs due to extended delivery timelines.

The City (MiWay specifically) is requesting \$990,000 to be pre-authorized ahead of the 2023 Business Plan and Budget approval.

Project Number	Project Name	2023 Funded
TWTR002740	Transit Route Supervisor Vehicle Acquisitions - Replacement	\$55,000
TWTR002761	Transit Change-Off Vehicle Acquisitions - Growth	\$55,000

TWTR003760	Transit Change-Off Vehicle Acquisitions - Replacement	\$440,000
TWTR008410	Transit Other Vehicles (Vans/Cars/Trucks) Acquisitions - Growth	\$220,000
TWTR009590	Transit Other Vehicles (Vans/Cars/Trucks) - Growth	\$220,000
	Total:	\$990,000

The City (MiWay specifically) is requesting \$1,185,000 to be pre-authorized ahead of the 2024 Business Plan and Budget approval.

Project Number	Project Name	2024 Forecast
TWTR006036	Transit Other Vehicles (Vans/Cars/Trucks) Acquisitions - Replacement	\$100,000
TWTR010505	Transit Change-Off Vehicle Acquisitions - Replacement	\$660,000
TWTR010500	Transit Route Supervisor Vehicle Acquisitions - Replacement	\$110,000
TWTR009590	Transit Other Vehicles (Vans/Cars/Trucks) - Growth	\$55,000
TWTR008874 *	Transit Change-Off Vehicle Acquisitions Replacement	\$260,000
	Total:	\$1,185,000

^{*} This project includes Federal and Provincial ICIP Funding.

Conclusion

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The City is committed to decarbonizing its fleet to help meet the City's GHG reduction targets. Recognizing the current supply issues, MiWay and Corporate Fleet are requesting approval to use single source and purchasing activities to ensure alignment with the City's climate change commitments and Corporate Green Fleet and Equipment policy and procure new and lightly used EVs to maintain and support both existing and new levels of service delivery.

Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works

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