

Date: September 20, 2021

To: Chair and Members of Budget Committee

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

Originator's files:

Meeting date:
October 6, 2021

Subject

MiWay 2022 and 2023 Bus Procurement, Subject to ICIP-MIS-01 Funding Approval

Recommendation

1. That the report entitled "MiWay 2022 and 2023 Bus Procurement, Subject to ICIP-MIS-01 Funding Approval" dated September 20, 2021 from the Commissioner of Transportation and Works be approved.
2. That the funds of \$183,400,000 be pre-authorized, subject to ICIP Funding Approval, to allow the 2022 and 2023 procurement of 2nd Generation Hybrid-Electric buses by competitive procurement as outlined in the corporate report dated September 20, 2021 entitled "MiWay 2022 and 2023 Bus Procurement, Subject to ICIP-MIS-01 Funding Approval" from the Commissioner of Transportation and Works and that the City of Mississauga contributes 26.7% of total project costs, while the Federal and Provincial government will fund the remaining total project costs (40.0% and 33.3% respectively).

Executive Summary

- The ICIP-MIS-01 (Bus Replacement Program) will provide much needed funding to allow MiWay to replace roughly MiWay public transit buses between 2021 and 2027.
- MiWay is seeking budget approval to move forward with the two-year procurement of 2nd Generation Hybrid-Electric buses which has been proven within the transit industry to reduce emissions and increased fuel efficiency compared to diesel buses. The multi-year procurement will allow MiWay the advantage of economies of scale for price advantages.
- As part of the two year bus procurement between 2022 and 2023, MiWay is expected to replace 165 buses which equates to 34% of its total fleet. There will be another (82) buses the following year in 2024.
- MiWay is seeking pre-approval of \$183,400,000 to purchase buses over a two year period (2022 and 2023). Mississauga will need to contribute 26.7% of total project costs, while the Federal and Provincial government will fund the remaining total project costs (40.0% and 33.3% respectively). The municipal portion of funds is equal to \$48,912,780.

Background

Hybrid-Electric Bus Procurement

On September 4th 2019, Council authorized the pre-approval of \$13,200,000 for the 2020 Capital Budget to purchase Eleven (11) Sixty-Foot Express Growth Buses with 2nd Generation Hybrid-Electric propulsion technology. At the time, this would allow MiWay to gain operational experience ahead of the larger multi-year procurement. This will also allow the City to apply and receive ICIP funding that would alleviate some of the City's financial pressure. As of September 2021, MiWay has been operating their forty-foot hybrid-electric buses for two years, their sixty-foot hybrid-electric buses for one year, and have an additional (5) sixty-foot local hybrid-electric buses on order to be delivered by October 2021. With recent operational experience with these buses, MiWay is seeing great benefits of this technology from a fuel savings, GHG reduction, and reliability perspective, and are confident that hybrid-electric buses are a feasible stepping stone for MiWay's journey to a fully zero-emission transit fleet.

Transit Bus Fleet Replacement Schedule

As part of the two year procurement between 2022 and 2023, MiWay is expected to replace 165 buses which equates to 34% of its total fleet. There will be another (82) buses in 2024.

	Multi-Year Procurement		← Remainder of ICIP Period →			
Bus Type	2022	2023	2024	2025	2026	2027
40' Local	74	53	74	15	43	0
60' Local	16	0	8	10	0	0
40' Express	0	0	0	20	0	15
60' Express	0	22	0	0	0	0
Total Buses	90	75	82	45	43	15

The replacement of the 2003 and 2005 New Flyers have already been deferred due to the anticipation of the ICIP funding announcement, as well as decreased capital expenditures due to COVID. As a result, these buses have been operating for 3 years past their expected life and are receiving 21% more maintenance to remain serviceable. This indicates we are already seeing serviceability issues that will now accelerate due to exceedance of life cycle. Currently, MiWay has parked (28) buses due to extensive engine, transmission, and/or structural issues, which have been deemed as cost-ineffective to repair. With projected service increases over the coming months and years, MiWay will need to replace these buses as soon as possible to maintain service levels.

The key advantage of a multi-year procurement is economies of scale prices since this will be a larger than typical order for MiWay. At the same time, this would allow OEMs to better plan for design and production schedules if orders are committed in advance, which would reduce risks of delivery delays. Prices will also be locked in throughout the duration of the multi-year procurement contract, therefore municipal capital budgets will be better informed of expected costs in the coming years.

Facility Infrastructure Requirements – Central Parkway (CP) Garage

As per the Climate Change Action Plan, in order for the City to meet the interim target of 40% reduction in GHG's compared to 1990 levels, as well as the target of 80% by 2050, MiWay has committed to only purchasing hybrid-electric buses going forward. In order to operate these buses out of the main bus facility, MiWay is currently undertaking a facility modification project at the Central Parkway (CP) bus storage garage to accommodate hybrid-electric buses which are taller than diesel buses. The facility modification project will raise the ductwork and associated mechanical infrastructure to accommodate the taller buses. This project has already commenced and is expected to be completed by early 2022.

Comments

ICIP Funding Approval for MIS-01 – Bus Replacement Program

The Investing in Canada Infrastructure Program (ICIP) is a ten-year federal infrastructure program designed to create long-term economic growth, build inclusive, sustainable and resilient communities and support a low-carbon economy. Through ICIP, the Federal government is providing \$33B in federal infrastructure funding to cost-share projects. On July 22, 2019, the Government of Ontario launched the ICIP Public Transit funding stream for inside the GTHA. Under the Public Transit Stream, funding allocations to municipalities and Metrolinx were established using a ridership formula. The City of Mississauga was allocated \$339M in federal funding and \$282.5M in provincial funding with a required City cost share of \$226M. Although an allocation has been provided, the ICIP Public Transit Stream is application based.

In October 2019, following Council approval, the City of Mississauga submitted applications for funding consideration in order to utilize the full funding allocation. As a result of MiWay's application submission, the ICIP-MIS-01 (Bus Replacement Program) is pending approval by the Ministry of Transportation, which will provide much needed funding to allow MiWay to purchase and replace aging public transit buses from now until 2027.

As part of the ICIP-MIS-01 (Bus Replacement Program), the total funding amount for the purchase of MiWay buses is \$359,700,000 between 2021 and 2027. Mississauga will need to contribute 26.7% of total project costs, while the Federal government will fund 40%, and the Provincial government will fund the remaining 33.3% of project costs. The table below shows the funding sources, % contribution, and total funding amounts that were approved.

Funding Source	% Contribution	2021-2027 Funding Amount
Federal	40.00 %	\$143,880,000
Provincial	33.33 %	\$119,888,010
Municipal (Mississauga)	26.67 %	\$95,931,990
Total:	100.00 %	\$359,700,000

Strategic Plan

The introduction of FCEBs 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. This includes joining the FCM Partners for Climate Protection program in 1999, integrating climate change and environmental considerations into the City's Strategic Plan in 2009, developing the City's Living Green Master Plan, integrating climate change considerations into its Official Plan in 2012, and becoming a signatory to the Global Covenant of Mayors for Climate and Energy (coalition of 10,000 Cities) in 2017.

Financial Impact

MiWay is seeking pre-approval of \$183,400,000, subject to ICIP Funding Approval, to purchase buses over a two year period (2022 and 2023). The 2022 Business Plan & Budget has the following budget request for 2022-2023 bus replacement program and the funding sources which are being requested for pre-approval through this Corporate Report.

Parent Number	TWTR009760	TWTR002752	
Questica PN	9760	2752	
	2022	2023	Total
Cost			
715380 - Vehicle Replacement Cost	99,600,000	83,800,000	183,400,000
Funding Source			
590132 - Recovery From Province	33,196,680	27,930,540	61,127,220
590133 - Recovery From Federal	39,840,000	33,520,000	73,360,000
575104 - Transfers To/From Reserve Fund	26,563,320	22,349,460	48,912,780

The municipal portion of \$48,912,780 is funded with Tax Debt account 37778.

Historically, it takes on average twelve months for buses to be delivered to the City of Mississauga, therefore it is important that the funds are pre-approved ahead of the 2022 Business Plan & Budget in order to receive the buses in an appropriate timeframe.

Conclusion

The ICIP-MIS-01 (Bus Replacement Program) is a much needed investment in public transit for the City of Mississauga. The purchase of hybrid-electric buses to replace aging diesel buses that have well surpassed their useful lives will lead to transit improvement outcomes including improved capacity of public transit infrastructure, and improved quality, safety, and access of our transit system.

If council pre-approves the funds required to purchase public transit buses and an ICIP Funding announcement is made soon, this will enable MiWay to catch up on previously deferred bus replacements. Replacing diesel buses with cleaner, fuel efficient, and proven hybrid-electric buses will mark a milestone for the City's commitment to a cleaner propulsion technology.



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

Prepared by: Stephen Bacchus, Manager Transit Fleet Assets