

City of Mississauga  
**Corporate Report**



<p>Date: September 5, 2023</p> <p>To: Chair and Members of General Committee</p>	<p>Originator's files:</p>
<p>From: Geoff Wright, P.Eng, MBA, Commissioner of Transportation and Works</p>	<p>Meeting date: September 20, 2023</p>

## Subject

### MiWay 2024 Hybrid Bus Procurement Update

## Recommendation

1. That the report entitled "MiWay 2024 Hybrid Bus Procurement Update" dated September 5, 2023 from the Commissioner of Transportation and Works be approved.
2. That additional funds of \$9,500,000 be approved to increase project PN # 24201 - Transit Bus Acquisitions - Hybrid Replacement gross budget to \$94,700,000 and the increase be incorporated into the 2024-2027 Business Plan & 2024 Capital Budget.
3. That the \$9,500,000 increase be funded from 33121-tax capital reserve fund and be pre-authorized in advance of the 2024-2027 Business Plan & 2024 Budget, to allow the award recommendation for the 2024 procurement of 82 Hybrid-Electric buses.

## Executive Summary

- At the March 8, 2023 session of General Committee, MiWay sought pre-approval of \$85,200,000 in advance of the 2024-2027 Business Plan & 2024 Budget, to allow for the procurement of 82 Hybrid-Electric buses.
- The lowest acceptable bid was higher than the allotted budget and MiWay is requesting an additional \$9,500,000 be pre-authorized in the 2024-2027 Business Plan & 2024 Budget to allow the award recommendation of the 2024 procurement of Hybrid-Electric buses.
- MiWay is replacing 82 forty-foot buses, which equates to 16% of the total bus fleet. These buses will replace the aging 2007, 2008, and 2009 MiWay buses, which have surpassed their economical service life.

## Background

### 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) was approved in Q1 2022 by the Ministry of Transportation, which provided much needed funding to allow MiWay to purchase and replace aging diesel buses with hybrid-electric buses. The scope of funding will allow 350 buses to be purchased between 2022 and 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 2022 and 2027. Mississauga will 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, percent contribution, and total funding amounts that were approved.

**Table 1: ICIP Funding Contribution Share**

<b>Funding Source</b>	<b>% Contribution</b>	<b>2022-2027 Funding Amount</b>
Federal	40.00 %	\$143,880,000
Provincial	33.33 %	\$119,888,010
Municipal (Mississauga)	26.67 %	\$95,931,990
<b>Total:</b>	<b>100.00 %</b>	<b>\$359,700,000</b>

### Transit Bus Fleet Replacement Schedule

As part of the 2024 bus procurement, MiWay will replace 82 forty-foot buses, which equates to 16% of its total fleet. The following bus procurements may include Zero-Emission Buses (Battery-Electric and/or Hydrogen Fuel Cell Electric) if the funding and associated infrastructure is available before then.

**Table 2: Fleet Replacement Plan 2024 – 2029**

	← <b>Remainder of ICIP Funding</b> →					
<b>Bus Type</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
Forty-Foot (40')	82	35	43	15	14	7
Sixty-Foot (60')	0	10	0	0	0	30

The 82 buses planned for purchase in 2024 will facilitate the replacement of MiWay's 2007, 2008, and 2009 buses. The replacement of these buses has been previously deferred due to the anticipation of the ICIP funding announcement. As a result, most of these buses have been operating past their expected life and are receiving more corrective maintenance to remain in service.

Since 2019, MiWay has purchased exclusively hybrid-electric buses, and by the end of 2023, MiWay will have a total of 206 hybrid-electric buses. MiWay is seeing benefits of this technology from a fuel savings, GHG reduction, and reliability perspective, and are confident that hybrid-electric buses are the stepping stone for MiWay's journey to a fully zero-emission transit fleet.

## Comments

### Hybrid-Electric Bus Procurement

On March 8, 2023, Council authorized the pre-approval of \$85,200,000 in advance of the 2024-2027 Business Plan & 2024 Budget to allow for the procurement of 82 Hybrid-Electric buses. The procurement was released on July 24, 2023 and closed on August 30, 2023. Upon bid review from staff, the lowest acceptable bid was higher than the allotted budget per the last Corporate Report request. Therefore, the City is requesting that additional funds of \$9,500,000 be pre-authorized in the 2024-2027 Business Plan & 2024 Budget to allow the award recommendation.

Due to inflation, parts shortages, unreliable component supplier performance, microchip shortages, higher labor costs, and higher financial and operating risk, a 24% increase in bus pricing has resulted compared to the last MiWay bus procurement in 2021. These higher bus costs are also being incurred by other Transit Agencies in North America, and are not unique to MiWay. The higher costs also span across all different bus suppliers and propulsion types including diesel, hybrid, battery-electric, and hydrogen fuel cell electric.

If approved, the City will award the 82 bus order to the lowest acceptable Bidder, and deliveries will begin in Q2 2024. Since this contract has not been officially awarded yet, the lowest acceptable Bidder has not been disclosed within this report.

## Strategic Plan

The purchase of Hybrid-Electric buses will 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.

The Climate Change Action Plan was approved in 2019 and calls for the City to significantly reduce its greenhouse gas (GHG) to meet Corporate GHG reduction targets. As Transit is the most significant source of GHGs corporately (approximately 70%), the decarbonization of the MiWay bus fleet is critical to meet these targets.

## Financial Impact

The 2024-2027 Business Plan & 2024 Budget has funding of \$85,200,000 in 2024 under project 24201 - Transit Bus Acquisitions - Hybrid Replacement.

MiWay is seeking pre-approval of an additional \$9,500,000 which will be incorporated into the 2024-2027 Business Plan & 2024 Budget and will increase project 24201 funding to \$94,700,000 to facilitate and award the purchase of 82 buses for delivery beginning in 2024. The additional funding of \$9,500,000 will be funded from the 33121-tax capital reserve fund.

## Conclusion

The ICIP-MIS-01 (Bus Replacement Program) is an important investment in public transit for the City of Mississauga. The purchase of hybrid-electric buses to replace aging diesel buses that have surpassed their useful life 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-authorizes the additional funds required to purchase hybrid-electric buses, this will enable MiWay to catch up on previously deferred bus replacements, and increase levels of service and reliability. Replacing diesel buses with greener bus propulsion technology will continue to advance the City's commitment towards a cleaner future.



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

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