



## REPORT

### Council

Meeting Date: May 29, 2023

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**FROM:** Oakville Transit

**DATE:** May 16, 2023

**SUBJECT:** Investing in Canada Infrastructure Program – Purchase of Oakville Transit’s first 15 conventional battery electric buses

**LOCATION:** Town-wide

**WARD:** Town-wide

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#### RECOMMENDATION:

That the 2023 capital budget be amended to add \$3.92 million to project 54412104 Electric Replacement Buses and that \$4.48 million be added to project 54412206 Electric Replacement Buses to cover the increased cost for the purchase of 15 electric conventional buses with \$6.50 million funded from the Transit equipment reserve and \$1.90 million from the Capital Reserve.

#### KEY FACTS:

The following are key points for consideration with respect to this report:

- Council approved the budget for the replacement of fifteen (15) 40-foot diesel buses that were at the end of their useful life, with 40-foot Battery Electric Buses (BEBs).
- The Town applied for funding in 2019 from the Investing in Canada Infrastructure Program (ICIP) using pricing quotes obtained via surrounding transit agencies and through the Ontario Public Transit Association. Pricing for each battery electric bus has since increased from the original budget.
- The Town released RFP-57-2022 in 2022, for the supply and delivery of (15) fifteen conventional electric buses. The Town received (2) compliant bids from qualified proponents to supply and deliver conventional electric replacement buses.

- Submissions received for RFP-57-2022 contained pricing exceeding the budgeted price per bus by \$560,000. The successful vendor selected to supply Oakville Transit with battery electric buses offered the lowest price from the RFP submissions received.
- Replacing 40-foot diesel powered buses with 40-foot zero emission BEBs contributes to the town's overall effort to "green" its transit fleet.
- Use of BEBs will significantly reduce greenhouse gas emissions and eliminate residential noise associated with operation of diesel buses and will improve the quality and safety of transit throughout the community.

## **BACKGROUND:**

### **Town staff worked with transit agencies and bus suppliers to identify battery electric bus costs**

Council approved the budget for the replacement of fifteen (15) 40-foot diesel buses that were at the end of their useful life, with 40-foot Battery Electric Buses (BEBs). Prior to submitting an application to ICIP for electric bus funding, Oakville Transit staff participated in meetings with regional and local transit agencies in 2019 as part of the Metrolinx Joint Procurement Initiative (TPI) to identify a budget for battery electric buses. This group of transit agencies along with bus manufacturers developed technical and procurement specifications for the supply and delivery of transit buses in Ontario. BEB costs identified in 2019 were then used to apply for ICIP funding to begin transitioning Oakville Transit’s diesel fleet to electric.

Since budgeting for battery electric replacement buses in 2019, bus suppliers and manufacturers identified that the cost per electric bus increased approximately 25-30% over original TPI pricing created in 2019. Price increases of BEBs have increased due to several key factors noted below and is resulting in transit agencies with few choices on how to proceed with purchasing new electric buses:

- Producer Price Index (PPI) increases from 2019 – the average change in prices that Canadian producers receive or pay for goods had annual inflationary increases on pricing related to both raw material supply and manufacturing of transit buses.
- Covid-19 impacts created rapidly rising global raw material costs and supply chain shortages, increasing pricing for the public transit manufacturing industry and its suppliers.

**COMMENT/OPTIONS:**

**Staff released RFP-57-2022 to purchase 15 battery electric buses to replace 15 end of life diesel buses.**

\$15.4 million (\$1.02 million per bus) was budgeted to replace 15 end-of-life conventional diesel buses with 15 conventional electric buses and was incorporated in projects 54412104 Electric Replacement Buses and 54412206 Electric Replacement Buses. Through RFP-57-2022, the Town received (2) compliant bids from qualified proponents to supply and deliver conventional electric replacement buses. The price for each battery electric bus has been identified as \$560,000 more per bus which represents a 55% increase over the original budget. An additional \$8.4 million is required in 2023 to complete the purchase of the 15 conventional electric buses through RFP-57-2022.

**The Town will receive 73% funding from the provincial and federal government per bus through the ICIP program.**

73% ICIP funding for the Town of Oakville is based on the original (2019) budget submitted and does not cover overruns or pricing increases. Therefore, the additional funds required for each bus would not qualify for increased ICIP funding and the Town would incur these additional costs.

**A total of 102 buses are planned for replacement over the next 13 years.**

Given the higher cost per bus, an estimated additional \$57 million would be required over a 13 year period to replace the current diesel conventional buses based on current pricing. To account for these increasing costs, they will be addressed during the 2024 budget process. The 10 year capital forecast will be revised accordingly and the Transit equipment reserve transfers in the operating budget will be updated to account for the additional funds required for the cost of the transit vehicles, estimated to be an additional \$65,000 annually per conventional bus and \$46,000 per specialized bus. The adjustments are required to plan for the future replacement of conventional electric buses. Staff will also continue to investigate funding options and grant opportunities to help offset these costs.

**Staff considered deferring the replacement of some or all of the 15 conventional buses to decrease the financial impact.**

Staff are not recommending deferring the purchase of the 15 electric battery buses due to several reasons:

- The current asset management replacement plan for the existing 15 end-of-life conventional buses is already several years behind due a delay in purchasing battery electric vehicles resulting from the COVID-19 pandemic.
- The annual cost to operate the new electric buses is estimated to be \$30,000 more per bus as compared to a diesel bus when factoring in fuel savings, electricity costs, and the increase in the transfer to the Transit equipment reserve for future replacement of electric buses. However, an end-of-life diesel bus would require significantly more maintenance to continue operating in service which is estimated to cost an additional \$75,000 annually. As such, the net cost to continue operating an end-of-life diesel bus is \$45,000 more as compared to the operation of a new electric bus.
- The current procurement timeline for electric buses is 12-16 months. Should the purchase of the battery electric buses be pushed into outlook years of the capital purchasing forecast, diesel buses will be required to continue operating in service which will delay in operating conventional battery electric buses in the Town.
- Current ICIP funding is available and has already been approved for the current forecast until the year 2026. The deadline to use ICIP funding is 2033. The delay in purchasing battery electric buses may impact the total amount of ICIP funding the Town is able to use by 2033.
- Delays in the purchase of the conventional electric buses will result in likely result in higher future prices as industry pricing increases.

**Purchasing battery electric buses will require an increase to the Transit equipment reserve fund.**

The available balance in the Transit equipment reserve after factoring in 2023 transfers to and from the reserve is \$6.50 million. The current balance in the reserve is insufficient to cover the additional cost of the 15 electric replacement buses as transfers into the reserve have been based on the lower cost diesel buses until now. Given the higher cost of electric buses, the operating transfer to the Transit equipment reserve will have to increase at an estimated \$65,000 annually

per conventional bus and \$46,000 per specialized bus; this will be adjusted during the 2024 budget process to plan for the replacement of electric buses.

**Staff recommend that the 2023 capital budget be amended to add \$3.92 million to project 54412104 Electric Replacement Buses and to add \$4.48 million to project 54412206 Electric Replacement Buses for a total of \$8.40 million.**

The amendment to the capital budget will cover the increased cost for the purchase of 15 electric conventional buses with \$6.50 million funded from the Transit equipment reserve and \$1.90 million from the Capital Reserve. This will leave a zero balance in the Transit equipment reserve. As indicated, the operating budget will be adjusted during the 2024 budget process to reflect the higher transfers to the Transit equipment reserve required for the replacement of electric buses.

#### **CONSIDERATIONS:**

##### **(A) PUBLIC**

Oakville residents and transit customers will benefit from the environmental benefits of electric buses and infrastructure. The transit customer travel experience will also be improved as a result of technology upgrades and service improvements.

##### **(B) FINANCIAL**

Staff are recommending that the 2023 capital budget be amended to add \$8.4 million for the replacement of 15 conventional buses.

##### **(C) IMPACT ON OTHER DEPARTMENTS & USERS**

Transit staff worked with Finance staff for this report.

##### **(D) CORPORATE STRATEGIC GOALS**

This report addresses the corporate strategic goal(s) to:

- Protect greenspace and promote environmentally sustainable practices
- Improve town’s multi-modal transportation network to support effective movement of people and goods
- To be the most livable town in Canada

##### **(E) CLIMATE CHANGE/ACTION**

Energy use and carbon emissions reductions have a direct effect on our climate, as they are the main drivers for climate change mitigation. By electrifying transit vehicles, the Town would be addressing climate change mitigation through its corporate activities.

**APPENDICES:**

None

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