



**TRANSIT AND PARKING
MEMORANDUM**

Page: 1
File:
Pending #:

TO: MAYOR, A. NUTTALL AND MEMBERS OF COUNCIL

FROM: B. FORSYTH, DIRECTOR OF TRANSIT AND PARKING

NOTED: R. JAMES-REID, EXECUTIVE DIRECTOR OF ACCESS BARRIE

RE: BATTERY ELECTRIC BUS PILOT

DATE: NOVEMBER 30, 2022

The purpose of this Memorandum is to provide members of Council with some information. On June 15, 2021, a staff report was presented to the [City Building Committee](#) summarizing the results of the Alternative Fuel Study completed by WSP Canada Inc. The staff report was received by the Committee and subsequently [approved by Council](#).

Since the staff report, staff have been developing the implementation plan of a Pilot Project - Battery Electric Bus (BEB) and Chargers.

Through 2022, funding for this Pilot Project has been secured from both within the City of Barrie (\$1.7M) and with grant funding from Infrastructure Canada's - Zero Emission Transit Fund (\$1.65M), for a total of \$3.35M. This will allow the City to purchase two (2) Battery Electric Buses and two (2) chargers for Barrie Transit.

As such, the procurement process is currently underway, where Barrie Transit will be going out to market to garner competitive bids for:

- Two (2) In-Depot Plug-In Chargers; and
- Two (2) Battery Electric Buses:
 - 1 x Fully Battery Electric Heater; and
 - 1 x Battery Electric Heater with Diesel Auxiliary.

The purchase of two (2) BEB's would allow the City to collect important data in operating the buses in various scenarios and compare two different BEB configurations. Where one could have fully battery electric heater and the other would have a diesel auxiliary heater with a battery electric drive train. Due to the weather and environmental conditions within Barrie, having this comparison of technology and data around battery performance during winter operations will help the City gain an understanding of the benefits and limitations of BEB's, as it pertains to the City of Barrie. This in turn will dictate the design and strategy in which the city transitions from fully diesel buses to BEB's in support of Councils' initiatives to reduce the City's carbon emissions to net-zero by the year 2050.

It is anticipated that the delivery of the chargers will be in 2023. However, due to ongoing supply chain issues, delivery of the buses could be closer to end of 2023.