

STAFF REPORT

THE CORPORATION OF THE TOWN OF COBOURG



Report to:	Mayor and Council Members	Priority:	<input checked="" type="checkbox"/> High <input type="checkbox"/> Low
Submitted by:	Laurie Wills Director, Public Works lwills@cobourg.ca	Meeting Type: Open Session <input checked="" type="checkbox"/> Closed Session <input type="checkbox"/>	
Meeting Date:	September 13, 2021		
Report No.:	Public Works-061-21		
Submit comments to Council			

Subject/Title: Purchase of a Specialized Transit Vehicle and Approval of Participation Fee for Electric Vehicle Feasibility Study

RECOMMENDATION:

THAT Council approve the purchase of a 2020 ARBOC 8m low floor accessible transit bus from Creative Carriage Ltd. at a total cost of \$152,439.53 including non-refundable HST to be 73.33% (\$111,783.91) funded by the Investing in Canada Infrastructure Program (ICIP): Transit Stream and 26.67% (\$40,655.62) funded from the Town of Cobourg vehicle replacement reserve.

FURTHER THAT Council approve \$5,500.00 plus HST in the 2022 budget to fund the Town's participation in the Metrolinx Transit Joint Procurement Initiative Battery Electric Bus (BEB) Road Map Project.

1. STRATEGIC PLAN

Invest in programs, services and infrastructure to make Cobourg more accessible

2. PUBLIC ENGAGEMENT

At a regular scheduled meeting of Cobourg's Accessibility Advisory Committee, held on Wednesday August 18, 2021, members unanimously endorsed the immediate purchase of a new specialized vehicle.

3. PURPOSE

To seek Council approval for the unbudgeted purchase of a back-up Wheels bus as well as a participation fee for an electric bus feasibility study.

4. ORIGIN AND LEGISLATION

In 2019, the Federal Government announced that the Town of Cobourg's application for the ICIP: Transit Stream was approved. One of the projects listed on the application was the purchase of a new specialized accessible transit bus to utilize as a back-up vehicle to the Town's existing specialized vehicle. The ICIP program provides funding for eligible costs with contributions from the Federal Government at 40%, Provincial Government at 33.33%, and the remaining contribution from the Town at 26.67%.

5. BACKGROUND

Two of the Town's three 30 foot transit fleet are nearing the end of their lifecycle, mechanical problems are occurring more frequently which is causing unreliability for riders. In addition, the Wheels back up bus was taken out of commission in 2019 due to mechanical failure as it had been due for replacement since 2014. Currently, we are experiencing delays in repairs for buses 906 and 907 (30 foot conventional buses) which required transmission replacements as well as driver seat replacements in 2021. With ongoing delays for transmission replacements and mechanical breakdowns, vehicles are often out of service. When vehicles have to be in the garage, a replacement is provided by Century Transportation (Town contractor) but the replacement does not always have the same accessibility features of the Town's fleet. It is often a school bus with a lift instead of a ramp and Staff often receive complaints from riders. In addition, the contractor charges the Town a higher hourly rate when their buses are utilized.

In 2021, the Town implemented the Cobourg Rides On Demand transit service under a one year pilot project which added a number of virtual stops within Town boundaries that were previously not serviced. However, the turning movements of the larger 30 foot conventional buses are challenged by the residential streets which has added more demand for the smaller Wheels bus to reach those areas. With an additional small vehicle it could act as a backup for both the Wheels and conventional services.

The Town is also enrolled in the Metrolinx Transit Procurement Initiative whereby many municipalities and transit authorities submit their fleet requirements and Metrolinx prepares the request for quotation and administers the procurement process on our behalf in order for us to obtain competitive pricing for purchasing multiple buses as a group instead of us each purchasing a single or minimal number of vehicles. Utilizing this service of great convenience and cost savings for a brand new vehicle (especially the larger more expensive vehicles), however the process of procurement and delivery can also take up to 1 or 2 years as experienced with the last 30 foot vehicle purchase in 2017.

6. ANALYSIS

Ideally, it would be possible to wait until after the pilot program has been completed in order to understand how many and what size of vehicles are needed to keep up with ridership demand. With the unreliability of the larger buses and the difficulties in maneuverability in residential areas, it is not realistic to defer the purchase of an additional bus until after the pilot nor is there time to go through the Metrolinx procurement process. Staff have been researching and inquiring locally about used or demonstration vehicles that may be for sale and available immediately.

The only currently available vehicle happens to be the exact version of the Town's existing Wheels bus, only 3 years newer. The available bus is a demo, meaning it has very few kilometers already on it and it is also slightly discounted for that reason. To take advantage of the 2020 demo unit priced under market value, is to purchase the vehicle as soon as possible while it is still available. The demo unit is considered new and has a full warranty; if approval is provided, delivery is expected within two (2) weeks.

Driver and bio-barriers as well as an Incline Assist (winch) were approved to be installed on Century Transportation's backup vehicle with funds allocated from the Safe Restart Agreement (SRA) Phase 3. Installing these features on a Town owned asset would be more beneficial to the Town and its riders.

The subject bus purchase proposal was brought to the Accessibility Advisory Committee on August 18th, 2021 for discussion and since the committee members are familiar with the existing Wheels bus, they too agreed that a second similar bus is necessary immediately.

Understanding that there is an increasing climate emergency and that municipalities are being encouraged to transition to an electric transit fleet, it is not possible to proceed with electric buses immediately as there is much research to be done first to fully understand the cost and operational implications that an electrified fleet would bring to the Town.

Staff are committed to researching the viability of municipal transit bus electrification and are requesting Council approval to participate in the Metrolinx Transit Procurement Initiative Battery Electric Bus (BEB) Road Map Project. There are six (6) stages of the road map as outlined below and a participation fee of \$5,500.00 plus HST, includes Stages 1 to 4. Staff attended a Transit Procurement Initiative (TPI) meeting with interested transit authority participants and the Ministry of Transportation (MTO) where the BEB Road Map was well received by MTO and they are now assessing whether the participation fee will be eligible for funding under the ICIP Transit Stream.

Battery Electric Bus Road Map Stages 1-6:

Stage 1: Complete business case analysis to show BEB advantage over existing fleet.

Stage 2: Route based modelling (software tool) - the Town of Cobourg will use On Demand service as well as fixed route service to determine types of buses (battery size, number of vehicles) and charging systems (power levels, on-route or in-depot chargers, etc.) required to electrify the fleet.

Stage 3: Infrastructure site assessment at garages and stations. An engineering assessment of garage infrastructure. The assessment would determine what type of in-depot chargers fit within the facility (e.g. wall-mounted plug-in chargers, roof-mounted pantograph chargers). An assessment of the electrical infrastructure would also be performed to determine power load capacity of the facility and required upgrades to accommodate electric buses. The local utility company would be engaged during this step. Lastly, the assessment would evaluate structural considerations, including whether the floor needs reinforcement to accommodate heavier BEB buses and whether roof reinforcements would be needed for roof-mounted pantographs. It should be noted that currently the Town's transit operation's contractor houses the Town's fleet in Port Hope. The recommended garage infrastructure would either apply to a privately owned company's garage or there would be a requirement to construct a new Town owned garage facility to house the Town's electric bus fleet.

Stage 4: Full fleet electrification implementation roadmap, including timeline, budget and evaluate the potential design, build, finance, operate and maintain (DBFOM) partnerships based on Stages 2-4.

Stage 5: RFP of electric buses and charging infrastructure - once a contract has been awarded, the Town of Cobourg will have the opportunity to proceed or decide to not participate in any further stages (additional fees may apply to opt in).

Stage 6: Pilot test procedure development (additional fees may apply to opt in).

7. FINANCIAL IMPLICATIONS/BUDGET IMPACTS

On the Town's ICIP application, an estimated price for a new Wheels bus was approximately \$170,000.00. The price submitted by Creative Carriage Ltd. of \$152,439.53 including non-refundable HST is within the estimated cost for this type of vehicle.

The Town's 26.67% contribution of \$40,655.62 is to be funded from the Town's vehicle replacement reserve.

The funds required to participate in the Metrolinx Transit Joint Procurement Initiative Battery Electric Bus (BEB) Road Map Project is \$5,596.80 including non-refundable HST which is to be included in the 2022 transit budget. The Metrolinx project is expected to commence in January 2022.

8. CONCLUSION

That Council approve the purchase of a 2020 ARBOC 8m low floor accessible transit bus from Creative Carriage Ltd. at a total cost of \$152,439.53 including non-refundable HST to be 73.33% (\$111,783.91) funded by the Investing in Canada Infrastructure Program (ICIP): Public Transit Stream and 26.67% (\$40,655.62) funded from the Town of Cobourg vehicle replacement reserve.

AND FURTHER THAT Council approve \$5,596.80 including non-refundable HST in the 2022 budget to fund the Town's participation in the Metrolinx Transit Joint Procurement Initiative Battery Electric Bus (BEB) Road Map Project.

Report Approval Details

Document Title:	New Wheels Bus and Metrolinx Electric Bus Feasibility Study - Public Works-061-21.docx
Attachments:	
Final Approval Date:	Sep 2, 2021

This report and all of its attachments were approved and signed as outlined below:

Tracey Vaughan, Chief Administrative Officer - Sep 2, 2021 - 4:07 PM