Page 1 of Report Number: TR-04-22



SUBJECT: CUTRIC/CUTZEB™ Joint Procurement Initiative

TO: Community Planning, Regulation & Mobility Cttee.

FROM: Transit Department

Report Number: TR-04-22

Wards Affected: All

File Numbers: 465-11-3

Date to Committee: September 13, 2022

Date to Council: September 20, 2022

Recommendation:

Receive transit department report TR-04-22 which outlines the key deliverables and planning activities to be developed by the Canadian Urban Transit Research & Innovation Consortiums (CUTRIC) Zero-Emissions Bus CUTZEB™ Joint Procurement Initiative to support the development of the Zero-Emission Bus Fleet Implementation and Rollout Plan, capital funding application(s) and joint procurement services for the supply of Zero Emission Buses (ZEBs), chargers, power supply services and infrastructure development services for Burlington Transit for the years 2023 to 2026; and

Direct the Director of Transit to confirm Burlington's participation in the CUTZEB™ joint procurement initiative at an estimated cost of \$92,500 plus HST, using existing funds received from the Provincial Gas Tax and authorize the Mayor and City Clerk to execute on behalf of the Corporation of the City of Burlington the necessary contracts with CUTZEB™, to the satisfaction of the Executive Director of Legal Services and the Director of Transit.

PURPOSE:

Vision to Focus Alignment:

- Improve integrated city mobility
- Support sustainable infrastructure and a resilient environment
- Deliver customer centric services with a focus on efficiency and technology transformation

Background and Discussion:

Over the past two years, Burlington Transit staff have worked with CUTRIC modeling our route network to analyze the potential opportunity for electrification of our fleet by participating in CUTRIC's Pan-Canadian Electric Bus Pilot Demonstration Project Phase II. In addition, modeling work has been completed to compare the use of hydrogen as an alternative source of fuel but has been deemed to be considerably more costly.

Throughout this period, staff have also continued to participate in industry discussions, forums and working groups dealing specifically with lessons learned and best practices from ZEB projects that are currently underway at other transit agencies.

CUTRIC has set up a separate not for profit entity called CUTZEB™ to manage the joint procurement initiative to ensure its industry members would not be conflicted to bid on a future RFP. The advantage of participating in the joint procurement with CUTZEB™ is that they will be procuring both the vehicles and the charging infrastructure through one RFP to ensure any issues with the vehicles and equipment will be the responsibility of the bidder.

As a final step in the completion of our work with CUTRIC, the completion of the Zero-Emission Bus Fleet Implementation and Rollout Plan is a critical step in the process for several reasons. A plan of this nature is a key requirement to apply for the Infrastructure Canada supported Zero Emission Transit Fund (ZETF), as it is viewed as a critical step to ensure a smooth and well-planned transition that has included consideration of operational and technical challenges associated with such a conversion. In March of 2022, Infrastructure Canada announced that the Canadian Urban Transit Research and Innovation Consortium (CUTRIC) had been selected to support transit systems by producing comprehensive and accurate zero emission transit bus electrification and planning studies. The cost for the City of Burlington related to the preparation of this report is \$92,500 plus HST and would use funds already received from the Provincial Gas Tax.

CUTRIC will complete the Zero-Emission Bus Fleet Implementation and Rollout Plan (The Plan), noting below the areas that the plan will include:

- Assessment of the current state
- Evaluation of electrical power services
- Review of operational goals and scenario development
- Comparative analysis of available vehicles and charging systems
- Infrastructure gap analysis and requirements identification
- Implementation planning and costing

Page 3 of Report Number: TR-04-22

Strategy/process

CUTZEB™ is planning to issue an RFP to procure electric buses and charging infrastructure in 2023. Once an award is made to the preferred vendors, then Burlington Transit would have the option to purchase this equipment through the joint procurement.

As part of the 2024 Capital Budget, Burlington Transit is planning to request the purchase of four electric buses and the necessary infrastructure to replace four diesel buses that are due to be retired. This would allow Transit to launch a small pilot of electric buses in 2024.

Financial Matters:

Total Financial Impact

The total cost of the Zero-Emission Bus Fleet Implementation and Rollout Plan is \$92,500 plus HST.

Source of Funding

The Plan will use funds already received from the Provincial Gas Tax.

Climate Implications

By engaging CUTRIC and CUTZEB™ to develop an implementation plan and roll out, it will bring the City closer to achieving the goals set out in the City's Climate Action Plan.

Conclusion:

Staff recommend developing the Zero-Emission Bus Fleet Implementation and Rollout Plan by engaging CUTRIC and CUTZEB™ to finalize the plan and will report back to Council in Q2 2023.

Respectfully submitted,

Catherine Baldelli
Director of Transit
905-335-7869 Ext. 7845

Sue Connor, Project Lead, Fleet Electrification Community Planning, Regulation & Mobility sue.connor@burlington.ca

Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.