

REPORT

PLANNING AND DEVELOPMENT COUNCIL

MEETING DATE: SEPTEMBER 9, 2019

FROM: Municipal Enforcement Services and Strategy Policy and Communications

DATE: August 25, 2019

SUBJECT: Electric Vehicle Charging Station Funding Opportunity

LOCATION: Oakville

WARD: Town wide

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RECOMMENDATION:

1. That the report from Municipal Enforcement Services and Strategy Policy and Communications dated August 25, 2019 entitled "Electric Vehicle Charging Station Funding Opportunity" be received.
2. That Council approve the application to Natural Resources Canada's Zero-Emission Vehicle Infrastructure Program for the acquisition and installation of EV charging stations in Oakville as detailed in the report from Municipal Enforcement Services and Strategy Policy and Communications dated August 25, 2019.
3. That, should the Zero-Emission Vehicle Infrastructure Program application for funding be successful, that \$282,000 be allocated from the Parking Reserve Fund to implement the program and that the associated Funding Agreement be executed in accordance with By-law 2013-057.

KEY FACTS:

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

- Natural Resources Canada has released a first round of funding through the Zero Emissions Vehicle Infrastructure Program (ZEVIP). The Program covers up to 50% or \$5 million of a project to install more than 20 electric vehicle charging stations.
- 15 town-owned sites have been identified as strong candidates for public charging infrastructure because of proximities to local businesses, community centres and 400 series highways.
- Staff are recommending an application for 20 dual Level 2 EV Chargers (totalling 40 EV Parking Spaces) town sites at a cost of \$564,000.

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- If awarded, \$282,000 will be allocated from the Parking Reserve Fund funds for the town's share of the project, as per requirements of the ZEVIP.
- Costs will be recovered through user fees, to be determined at a later date,

BACKGROUND:

Oakville has one of the highest electric vehicle (EV) ownership per capita in Ontario. Vehicle registration data in Oakville indicates that EV ownership is increasing annually, growing 25% from 2016 to 2017. Although EV ownership is growing in Oakville, the town does not currently provide any public parking spaces with EV charging stations.

In 2016, the Town of Oakville submitted a joint application to the Province of Ontario's Electric Vehicle Charging Ontario program. The program lasted one year in its original form. Though the town's application was unsuccessful, 10 town-owned facilities and parking areas were identified as strong candidates for public EV charging stations. As well, the installation of EV charging stations were identified and approved as part of the Lakeshore Road reconstruction project.

Through Budget 2019, the Government of Canada recently announced the \$130 million ZEVIP to fund the development of a cross-country network of EV charging stations between 2019 and 2024. The program, administered by Natural Resources Canada, will fund up to 50 percent of total project costs to a maximum of \$5 million per project. The first round of applications is open until September 18, 2019 and focuses on public spaces and on-street parking. Eligible projects must include a minimum of 20 charging stations and be completed within eighteen months of approval.

Applicants must secure 50 percent of total project costs in advance of the application submission, work with local energy suppliers where significant electrical upgrades are necessary and own or have access to the land where the charging stations are planned to be installed. Staff are therefore requesting Council's approval of the application to Natural Resources Canada's ZEVIP for funding the acquisition and installation of EV charging stations in Oakville.

COMMENT/OPTIONS:

The application to ZEVIP directly aligns with Council's Strategic Goals and Objectives. Specifically, the program supports the key areas of focus to foster an environment that engages residents of all ages, abilities and backgrounds and to protect greenspace and promote environmentally sustainable practices. The program further aligns with Council's recent declaration of a climate emergency and the town's contributions in developing Oakville's Community Energy Plan in partnership with Sheridan College and the Oakville Energy Task Force.

Appendix A provides a description of EVs and EV Chargers. It is widely recognized that EVs are critical to decarbonizing the transportation sector, which makes up half of Oakville's community-wide greenhouse gas (GHG) emissions. Research shows that range anxiety, the concern of where to charge an EV, remains the second biggest barrier for people who are interested in purchasing EVs in Oakville. Through ZEVIP funding, the town has an opportunity to develop a community network of visible EV chargers throughout Oakville and further support a cross-Canada corridor of charging infrastructure along the 400 series highways.

Recommended Locations for EV Chargers

Level 2 chargers are being proposed for EV parking spaces identified in Table 1. Each location is on town-owned land and is in or near highly trafficked destinations such as local shops, businesses and recreation centres or in close proximity to a major road corridor/highway.

Table 1

	Location	Facility	Ward	# EV Parking Spaces
1	Lot 1* – Church Street	Commercial Parking Lot	3	2
2	Lot 2* – Church Street	Commercial Parking Lot	3	2
3	Lot 3 – Church Street	Commercial Parking Lot	3	2
4	Lot 8* – Randall/Reynolds Streets	Commercial Parking Lot	3	2
5	Lot 12* – Florence/Washington Streets	Commercial Parking Lot	2	2
6	Lot 17 – Kerr/Westside Streets	Commercial Parking Lot	2	2
7	Lakeshore Road East	On-street Commercial Parking	3	8
8	Ontario Street	On-street Commercial Parking	1	2
9	Bronte Road West	On-street Commercial Parking	1	2
10	Town Hall – 1225 Trafalgar Road	Municipal Offices	6	4
11	Iroquois Ridge Community Centre	Community Center and Park	6	2
12	River Oaks Community Centre	Community Center and Park	5	2
13	Sixteen Mile Community Centre	Community Center and Park	7	2
14	Joshua Creek Community Centre	Community Center and Park	6	2
15	Glen Abbey Community Centre	Community Center and Park	4	4
	Total EV Parking Spaces			40

*Locations that were not previously identified for EV charging infrastructure funding or projects

With the exception of Lakeshore Road East, Town Hall and Glen Abbey each location will have two EV dedicated parking spots serviced with one pedestal dual Level 2 charger. Town Hall and Glen Abbey will have four spaces and two dual chargers, while Lakeshore Road East will have eight spaces and four dual chargers.

The downtown Lakeshore Road East revitalization budget includes funding for the purchase and installation of EV chargers. Four spaces will be developed as part of the first phase construction, scheduled to be complete by November 2019. The remaining four EV parking spaces will be implemented in the second phase of the project, scheduled to be complete by November 2020.

EV Charging Stations

Staff have identified EV chargers that could integrate with the town's parking ticket systems for efficient reporting, management and enforcement of vehicles in EV parking spaces. The integrated system ensures parkers pay one fee, for both charging and parking. Precise ParkLink, the town's current supplier of pay by plate multi-space parking meters is authorized to supply and maintain ChargePoint EV chargers. The ChargePoint EV charger provides dual Level 2 chargers for commercial use.

In consultation with Engineering and Construction, staff have determine the capital cost for acquisition and installation of EV Chargers through Precise ParkLink along with preparations and improvements for EV parking spaces. The cost estimate to implement the project is presented in Table 2.

Table 2	
Item	Cost
Site Preparation and Improvements*	\$64,000
Hydro Infrastructure and Services*	\$236,000
EV Chargers and Installation*	\$184,000
Project Management	\$45,000
Communications	\$5,000
Contingency	<u>\$30,000</u>
Total	\$564,000
Town's Share	\$282,000

*Lakeshore Road East EV Parking costs have been included within the downtown reconstruction project.

Rates, Fees, Regulations, Policies and Procedures

Town owned EV chargers will be available for public use subject to paying a fee. In downtown Oakville, Kerr Village and Bronte Village, the fee paid will include parking fees for commercial parking spaces. Rates and fees for using EV chargers will support the capital investment made by the town, energy, ongoing maintenance and operational expenses on a full cost recovery basis. These rates and fees will be established by the town before installation of the EV chargers.

Along with the rates and fees, regulations, policies and procedures will need to be approved to effectively manage and enforce EV parking spaces. This will require

updates to by-laws that control parking hours and durations. Updates will be brought for Council's consideration before installation of the EV chargers.

Funding and Financing

The project cost to implement EV chargers at the 15 identified locations in Table 1 is estimated to be \$564,000. Should the application for ZEVIP be successful in providing funding, the town's share of the project would be \$282,000. Staff are recommending that the town's share of funding be allocated from the Parking Reserve Fund. Revenues from the use of EV chargers will pay operating cost including payback of capital costs into the Parking Reserve Fund.

Estimated revenues and operating costs for EV chargers will be included in the 2020 Operating Budget submissions.

EV Chargers Implementation Plan

Table 3 outlines the proposed timing to implement EV chargers in locations identified in Table 1.

Table 3		
Timing	Tasks	Comment
September 2019	<ul style="list-style-type: none"> Submit application for ZEVIP funding grant 	Application to include 15 locations for 40 EV parking spaces
	<ul style="list-style-type: none"> Order EV Chargers for Lakeshore Road East 	Site preparation for EV Chargers on Lakeshore Road East is included within the reconstruction project
October 2019	<ul style="list-style-type: none"> Develop Rates, Fees, Regulations, Policies and Procedures 	For Council Approval in November 2019
	<ul style="list-style-type: none"> Develop Communication Plan 	To inform stakeholders
November 2019	<ul style="list-style-type: none"> By-law Approvals 	To control and regulate EV Parking Spaces
	<ul style="list-style-type: none"> Install EV chargers on Lakeshore Road East 	Phase 1 installation
	<ul style="list-style-type: none"> Communication 	Notify and inform users and stakeholders of initial installation
TBD	<ul style="list-style-type: none"> ZEVIP funding grant response 	
	<ul style="list-style-type: none"> Execute funding agreement 	Subject to funding grant approval
	<ul style="list-style-type: none"> Detailed installation and implementation plan 	To plan and schedule timing of site preparations and installations, subject to funding grant approval

	<ul style="list-style-type: none"> Order EV chargers for remaining locations 	Subject to funding grant approval
	<ul style="list-style-type: none"> Site Preparation and Improvements 	Per detailed implementation plan
	<ul style="list-style-type: none"> Install EV chargers 	Per detailed implementation plan
	<ul style="list-style-type: none"> Communication 	Notify and inform users and stakeholders of further installations
November 2020	<ul style="list-style-type: none"> Install EV chargers on Lakeshore Road East 	Phase 2 installation

The ZEVIP program directly aligns with several of the Town's plans, policies, and guiding frameworks include Vision 2057-Oakville's Master Plan, Environmental Sustainability Strategy, Transportation Master Plan, and the Sustainable Green Fleet Guide along with Council's recent climate emergency declaration. An application and the subsequent successful installment of an EV charging network would continue to position the town as a leader in the environment and climate change action.

Should the Zero-Emission Vehicle Infrastructure Program application for funding be successful, staff are recommending that the associated Funding Agreement be executed in accordance with By-law 2013-057, a by-law to provide for the execution of documents on behalf of the Corporation of the Town of Oakville.

CONSIDERATIONS:

(A) PUBLIC

Staff is developing a communication plan to inform stakeholders and potential users of EV chargers and parking spaces. Signage, ground markings and on-line applications will further inform potential users.

(B) FINANCIAL

Should the application for ZEVIP be successful in providing funding, the town's share of the project would be \$282,000. Staff are recommending that the town's share of funding be allocated from the Parking Reserve Fund.

Revenues from the use of the EV chargers will pay the operating cost including payback of the capital cost.

Estimate revenues and operating costs for the EV chargers will be included in the 2020 Operating Budget submissions.

(C) IMPACT ON OTHER DEPARTMENTS & USERS

Staff from Engineering and Construction, Sustainability and Government Relations, Communications and Municipal Enforcement Services will work together to develop policy and by-laws to manage the EV chargers and their use. They will also collaborate in the installation, public education, signage, and ongoing enforcement that will come with the site.

(D) CORPORATE AND/OR DEPARTMENT STRATEGIC GOALS

This report addresses the corporate strategic goal to:

- enhance our economic environment
- have environmentally sustainable programs/services
- continuously improve our programs and services
- provide outstanding service to our residents and businesses
- be fiscally sustainable

(E) COMMUNITY SUSTAINABILITY

Plug-in hybrid and battery electric vehicles emit significantly less to zero tail pipe emissions. As the transportation sector represents almost half of Oakville community-wide greenhouse gas emissions, greater uptake of these vehicles will support transitioning to a low-carbon future.

APPENDICES:

Appendix A - Electric Vehicles and EV Chargers

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