Council Report

Report Number:	**BP2025-001**
Meeting Date:	March 18, 2025
Title:	**Electric Vehicle Charger Installation**
Description:	Installation of Electric Vehicle Charging Units and identified funding source to support fleet transition to alternative vehicles.
Author and Title:	James Smith, Manager of Buildings and Property

Recommendation(s):

That Report BP2025-001, **Electric Vehicle Charger Installation**, be received; and

That funding to an upset limit of $450,000.00 be provided from the Capital Contingency Reserve for the purchase and installation of two Electric Vehicle Charging Units to service and support 5 municipal fleet electric vehicles to be acquired in 2025.

Department Head: _____

Financial/Legal/HR/Other:_____

Chief Administrative Officer:_____

Background:

At the Council Meeting on December 12, 2023, Report FL2023-001, Feasibility of Transition of Fleet to Electric Update (Appendix A) was presented and endorsed. An outcome of the report was the establishment of an internal Electric Vehicle (EV) Working Group. The group was formed to assess and determine the need for charging infrastructure within the municipality to support both municipal staff and the public. The group focused on identifying potential locations for charging stations, taking into consideration factors such as demand, power capacity, and existing infrastructure. In addition, thorough research was conducted to explore available grant funding opportunities to support the implementation of this infrastructure.

Funding opportunities related to the installation of charging stations for municipal fleet were pursued with no success. Staff are not aware of any current grant programs to support this infrastructure.

This report provides information on charging unit location, installation costs and the current landscape of alternate vehicle technology.

Rationale:

City Fleet's EV Strategy

Fleet staff have determined that vans, cars, and small to mid-sized SUVs represent the most suitable electric vehicle (EV) categories for rural municipal operations, based on their advanced technology, cost-effectiveness, and adequate battery performance. In response, a comprehensive multi-year EV fleet transition plan has been developed, with annual updates to ensure alignment with evolving needs, changes in technology and capabilities. Table 1 outlines the projected fleet purchases through 2033, with the first major purchase scheduled for 2025, involving the acquisition of 5 vehicles. The subsequent bulk purchase is planned for 2029.

Table 1 – 9 Year EV Fleet Procurement Plan

9 Year EV Fleet Procurement (Includes Additions to the Fleet)																				
Project Title	Category	2025		2026		2027		2028		2029		2030		2031		2032		2033		Total
		ICE	EV	ICE	EV	ICE	EV	ICE	EV	ICE	EV	ICE	EV	ICE	EV	ICE	EV	ICE	EV	
Buses	Transit	-	-	1	-	4	-	1	-	1	-	1	-	-	-	1	-	0	-	9
Medium Duty Trucks	Fleet	1	-	2	-	1	-	1	-	-	-	2	-	1	-	3	-	-	-	11
Cars/Cross Over SUV	Fleet	-	5	-	-	0	-	-	0	-	3	-	1		1	-	1	-	1	12
Pick up Trucks	Fleet	17	-	-	-	0	-	3	-	11	-	10	-	-	-	9	-	23	-	73
Vans	Fleet	3	-	-	-	0	-	1	-	-	4	-	-	1	-	1	1	-	-	11
Total		**21**	**5**	**3**	**-**	**5**	**-**	**6**	**-**	**12**	**7**	**13**	**1**	**2**	**1**	**14**	**2**	**23**	**1**	**116**
Grand Total		**26**		**3**		**5**		**6**		**19**		**14**		**3**		**16**		**24**		**116**

Over the next nine years, a plan has been established to replace 116 passenger vehicles in accordance with lifecycle schedules. The EV implementation strategy includes:

- **Up to 17 EVs** phased into the fleet (see Table 1).
- **EV allocations** across multiple City departments (see Table 2).
- **EV locations and required charging infrastructure** (see Table 3).
- **Total chargers and charging ports** required to support the transition (see Table 4).

This approach facilitates a gradual transition to fleet electrification, enabling the City to capitalize on advancements in EV technology while managing potential operational risks. A cautious strategy allows for flexibility, providing opportunities to pause or adjust future plans as needed to ensure a feasible and cost-effective investment.

Table 2 – 9 Year EV Division Locations and Potential Charging Need

9 Year EV Division Locations & Potential Charging Need																			
Division	2025		2026		2027		2028		2029		2030		2031		2032		2033		Office Location
	SUV	Van	SUV	Van	SUV	Van	SUV	Van	SUV	Van	SUV	Van	SUV	Van	SUV	Van	SUV	Van	
Human Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68 Lindsay St N., Lindsay
By-Law	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-	37 Lindsay Street South,
Building Inspectors	5	-	-	-	-	-	-	-	3	-	-	-	1	-	-	-	1	-	180 Kent St. Lindsay and 9
Engineering	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	322 Kent St. Lindsay
Transit Admin	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	180 Kent St. Lindsay
City Wide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	89 St. David St.
IT	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	26 Francis St, Lindsay
Total	5	0	0	0	0	0	0	0	3	4	1	0	1	0	1	1	1	0	
Grand Total	5		0		0		0		7		1		1		2		1		17 Total EV Vehicles

Table 3 – 9 Year EV Charging Requirements and Locations

9 Year EV Charging Requirements & Locations																			
EV Divisions	2025		2026		2027		2028		2029		2030		2031		2032		2033		Office Location
	Chargers	Charging Ports	Chargers	Charging Ports	Chargers	Charging Ports	Chargers	Charging Ports	Chargers	Charging Ports	Chargers	Charging Ports	Chargers	Charging Ports	Chargers	Charging Ports	Chargers	Charging Ports	
Human Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68 Lindsay St N., Lindsay
By-Law	-	-	-	-	-	-	-	-	1	2	-	-	-	-	1	1	-	-	37 Lindsay Street South, Lindsay
Building Inspectors	2	4	-	-	-	-	-	-	-	-	-	-	1	2	-	-	1	1	180 Kent St. Lindsay Rd,
Building Inspectors	-	-	-	-	-	-	-	-	2	3	-	-	-	-	-	-	-	-	9 Grandy Rd, Coboconk
Engineering	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	322 Kent St. Lindsay
Transit Admin	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	180 Kent St. Lindsay
City Wide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	89 St. David St.
IT	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	26 Francis St, Lindsay
Total	2	4	0	0	0	0	0	0	4	7	1	1	1	2	2	2	1	1	17 Total Required EV Charging Ports

Table 4 – Total Required EV Charging Ports By Location

Total Required EV Charging Ports By Location	
Office Location	**QTY Charging Ports**
68 Lindsay St N., Lindsay	0
37 Lindsay Street South, Lindsay	3
180 Kent St. Lindsay	7
9 Grandy Rd, Coboconk	3
322 Kent St. Lindsay	1
89 St. David St.	2
26 Francis St, Lindsay	1
Total Required EV Charging Ports	17

Based on the Fleet's Electric Vehicle replacement plan, the first vehicles scheduled for replacement in 2025 are the vehicles used by the City's building inspectors. These vehicles are currently based out of the 180 Kent Street parking lot. Staff have investigated the various power sources in the area and have determined that EV charging units can be accommodated at this site. To install the new EV charging units, civil and electrical work will be required. The cost to install two 120kW DC Fast EV charging units within the municipal parking lot is approximately $450,000. These funds are not included within the 2025 Capital Budget. To support this investment, the cost of installing the charging units can be allocated from the Capital Contingency Reserve.

Other Alternatives Considered:

The investment in EV charging units could be postponed to a future year and incorporated into the relevant Capital Budget, deferring the $450,000 installation cost in 2025. The fleet greening initiative can still proceed in 2025 with the purchase of five parallel hybrid vehicles.

Alignment to Strategic Priorities:

A Healthy Environment
Installing an EV charger in the City of Kawartha Lakes supports this priority by reducing emissions and improving air quality. By investing in this infrastructure, the City is taking a proactive step toward reducing reliance on fossil fuels and promoting cleaner transportation options. It also reinforces the City's commitment to sustainability and environmental leadership, contributing to a more sustainable community.

Good Government
Installing an EV charger in the City of Kawartha Lakes supports this priority by investing in smart infrastructure that meets the direction provided by Council. Having accessible charging options ensures the City is keeping up with demand for sustainability. It also shows responsible planning towards the Fleet department's plan for converting vehicles from gas powered to electric.

Financial/Operation Impacts:

The total cost for the installation of two 120kW DC Fast EV charging units with two charging ports on each unit is approximately $450,000. This includes the cost of the chargers, all required civil and electrical work for installation, transformer upgrade and contingency budget to cover any unforeseen issues. Funding for this installation will come from the Capital Contingency Reserve.

Servicing Implications:

NA

Consultations:

Director of Community Services

Director of Corporate Services

Director of Public Works

Manager of Fleet and Transit

CAO

Attachments:

FL2023-001
Feasibility of Transit

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Department Head: Jenn Johnson