# TOWN OF TRURO EV FLEET CAPITAL IMPLEMENTATION & PHASING PLAN

Town of Truro

## ELECTRIC VEHICLE CHARGING IMPLEMENTATION & PHASING PLAN

September 21, 2026




**EASTPOINT**

**ARCHITECTURE – ENGINEERING – SUSTAINABILITY**

EastPoint Reference No. 347004

# SUBMISSIONS

| EV Fleet Capital Implementation & Phasing Plan | |
|---|---|
| **Town of Truro EV Fleet Capital Implementation & Phasing Plan** | |
| **REPORT PREPARED FOR** | **REPORT SUBMITTED BY** |
| Town of Truro<br><br>695 Prince Street<br>Truro, Nova Scotia B2N 1G5<br>902.895.4484 \| truro.ca | EastPoint Engineering Ltd.<br><br>1801 Hollis Street, Suite 1800<br>Halifax, Nova Scotia B3J 3N4<br>902.422.2000 \| eastpoint.ca |
| | EastPoint Reference No. 347004 |

| REV | DATE OF ISSUE | DESCRIPTION |
|---|---|---|
| 1 | July 31, 2026 | Final Report |
| 2 | September 21, 2026 | Revised Final Report |
| | | |
| | | |

Limited Liability:
This report has been prepared by EastPoint Engineering Ltd. for the consideration of the party indicated herein. The content reflects our professional judgment based on the information made available to us at the time of preparation. Without express written permission, any use by which a third party makes of this report, or any reliance on which decisions are to be made based on it, are the responsibility of such third parties. EastPoint Engineering Ltd. accepts no responsibility for any damages suffered by any third party as a result of decisions made or actions based on this report.

# CONTENTS

1 INTRODUCTION ..... 5
1.1 Background and Objectives ..... 5
1.2 Client Information ..... 5
2 MUNICIPAL FLEET AND FACILITY OVERVIEW ..... 6
2.1 Municipal Fleet Overview ..... 6
2.2 Municipal Facility Overview ..... 6
3 CHARGING INFRASTRUCTURE PROGRAM ..... 7
4 TECHNICAL FEASIBILITY ASSESSMENT ..... 8
4.1 Prioritization Matrix ..... 8
4.1.1 Step 1: Technical Feasibility Screening ..... 8
4.1.2 Step 2: Ranked Metrics ..... 8
5 FINANCIAL ANALYSIS ..... 10
5.1 Analysis Assumptions ..... 10
5.1.1 fuel and electricity rates ..... 10
5.1.2 fleet utilization data ..... 11
5.2 Cost Savings and Capital Expenditure ..... 11
5.2.1 maintenance cost savings ..... 11
5.2.2 Capital Cost Summary ..... 12
6 GHG EMISSIONS IMPACT ..... 13
7 GRANT OPPORTUNITIES ..... 15
7.1 Green Municipal Fund (GMF) ..... 15
7.2 Zero Emission Vehicle Infrastructure Program (ZEVIP) ..... 15
7.3 Build Communities Strong Fund ..... 15
8 IMPLEMENTATION PLAN ..... 17
8.1 Prepare Issued-For-Tender (IFT) Design Packages ..... 17
8.2 Project Phasing ..... 17
9 CLOSING ..... 20

# LIST OF FIGURES

FIGURE 1. CURRENT AND FUTURE GHG EMISSIONS PER FACILITY ..... 14

# LIST OF TABLES

TABLE 1. SUMMARY OF PHASING SEQUENCE FOR LEVEL 2 CHARGERS AND ASSOCIATED SAVINGS. ..... 3

TABLE 2. ROM COSTS FOR LEVEL 2 VS. LEVEL 3 CHARGERS AT SELECT FACILITIES. ..... 3
TABLE 3. SUMMARY OF EXTERNAL FUNDING OPPORTUNITIES. ..... 4
TABLE 4. PROPOSED NUMBER OF CHARGING STATIONS PER FACILITY ..... 7
TABLE 5. TECHNICAL FEASIBILITY RATING SUMMARY PER FACILITY ..... 8
TABLE 6. COST AND SAVINGS RANKING FOR EVSE AT ASSESSED FACILITIES ..... 9
TABLE 7. ESTIMATED MAINTENANCE COSTS FOR DIFFERENT ICE VEHICLES ..... 12
TABLE 8. EVSE ROM CAPITAL COST BREAKDOWN SUMMARY PER FACILITY ..... 12
TABLE 9. GHG SAVINGS PER FACILITY ..... 13

# LIST OF APPENDICES

APPENDIX A - Fuel, Cost, and GHG Savings Assessment
APPENDIX B - Capital Cost Breakdown for EVSE Installation

# EXECUTIVE SUMMARY

## Truro's Electric Vehicle Plan at a Glance

The Town of Truro is seeking to decarbonize its municipal fleet as part of its Community Energy and Emissions Plan (CEEP) and its broader asset management goals.

In 2025, EastPoint completed an Options Analysis to evaluate existing electrical capacity, parking availability, and fleet utilization data to determine infrastructure readiness and identify priority locations for Electric Vehicle Supply Equipment (EVSE). Approximately 22 municipal fleet vehicles across six (6) facilities were assessed for near-term electrification, with Level 2 dual-port chargers recommended as the primary charging solution due to their compatibility with overnight fleet charging and lower capital costs.

In 2026, the Town of Truro engaged EastPoint to design EVSE upgrades at the six (6) municipal buildings identified in the Options Analysis, as well as to produce an implementation and phasing plan to guide the rollout of EVSE as the Town begins to introduce hybrid and fully electric vehicles to its fleet. The objective of this plan is to provide the Town with a capital phasing strategy that balances infrastructure readiness, cost effectiveness, operational requirements, and Greenhouse Gas (GHG) reduction potential.

### How to Use This Document

This document summarizes the plan's findings, recommended actions, and initial implementation priorities. The full Capital Implementation & Phasing Plan remains the governing source for the methodology, infrastructure details, technical and financial analysis, limitations, and implementation roadmap.

### Why a Phased Approach

While all the assessed sites can potentially support EV charging, they are not equally ready for implementation. The recommended phasing plan balances operational considerations with infrastructure readiness, site constraints, and the timing of fleet vehicle replacement. This avoids installing higher-cost infrastructure before it is needed, while allowing the Town to begin early electrification efforts at more feasible sites.

## How the Plan Was Developed

The initial assessment combined a prioritization framework which first involved screening based on technical parameters, followed by a ranked system based on financial viability and GHG reduction potential.

### Technical Assessment

The six (6) sites were screened using electrical capacity, space and parking availability, and infrastructure complexity to determine near-term feasibility. The rationale behind these criteria involves the following:

- Electrical capacity was rated based on the spare load capacity on the existing electrical service at each facility.
- Space availability reflects the existing parking layout at each facility.
- Infrastructure complexity reflects the upgrades required for both the electrical service and the parking layout at each facility.

### Financial Assessment

Fleet vehicle GPS data established each vehicle's primary parking location, average daily kilometers travelled, and longest dwell period. NRCan fuel ratings were used to estimate annual gasoline usage per vehicle, which was compared with modeled EV electricity use. Estimate annual cost savings for electric vehicles combine fuel savings as well as an assumed 40% maintenance cost reduction when compared to traditional combustion engine vehicles. Applicable Nova Scotia Power utility rates were used for electricity charges with no added demand charges considered based on the assumption of managed overnight charging. Rough Order of Magnitude (ROM) installation costs are based on the site-specific design features and include civil and electrical work, project markups, and contingencies.

### Greenhouse Gas Emissions Assessment

Annual greenhouse gas (GHG) emissions were calculated for pre- and post-electrification of the fleet vehicles at each facility. As Nova Scotia's electric grid remains one of Canada's most carbon-intensive electricity grids, which relies heavily on fossil fuels, no significant GHG emissions would be realized through short-term electrification of fleet vehicles. However, the GHG emissions savings have the potential to improve significantly over time through grid decarbonization under the Province's Clean Power Plan, while traditional combustion engine vehicles will only marginally improve their emissions through improving fuel efficiency standards. GHG savings were based on projected 2030 emissions for Zero-Emission Vehicles (ZEVs).

The total potential GHG savings for Truro's fleet assume all eligible light-duty municipal fleet vehicles are replaced with equivalent EVs. The GHG savings therefore represent the long-term emissions reduction potential once the Town's eligible fleet has fully transitioned to EVs.

## Recommended Phasing Plan

All six facilities can support EV charging infrastructure, though electrical upgrades and infrastructure complexity vary by site. Level 2 chargers are sufficient for most fleet operations, while optional Level 3 DC fast chargers may be warranted in the future at the Truro Police Service and the Public Works Facility. Facilities were prioritized based on technical feasibility, operational efficiencies and GHG savings, and fleet demand.

## Level 2 EVSE Implementation Plan

***Phase 1 - Near-Term Implementation (2027 - 2029):***

Install three (3) dual-port Level 2 stations at the **Truro Town Hall** and three (3) dual-port Level 2 stations at the **Truro Police Service**. This creates 12 total charging stalls for a combined ROM capital cost of $215,280.

***Phase 2 - Operational Fleet Expansion (2029 - 2031):***

Install three (3) dual-port Level 2 stations for a total of six (6) charging stalls at the **Public Works Facility** after the Town confirms a secure charging and parking strategy for the site. ROM capital cost is $105,160.

***Phase 3 - Longer-Term Implementation or Strategic Opportunities (Post 2031):***

Facilitate installations at the **Water Treatment Facility**, **Colchester Legion Stadium**, and **Douglas Street Recreation Centre** in coordination with future vehicle replacement and other site work. The combined ROM capital cost is $114,873.

**Table 1. Summary of phasing plan for Level 2 chargers and associated savings.**

| Facility | Phase | Level 2 Charging Stations | ROM Capital Cost ($) | Annual Operational Savings ($) | Simple Payback (yr) | Annual GHG Savings (kg) |
|---|---|---|---|---|---|---|
| Truro Town Hall | 1 | 3 (6 stalls) | $107,020 | $10,304 | 10.4 | 4,476 |
| Truro Police Service | 1 | 3 (6 stalls) | $108,260 | $15,141 | 7.2 | 8,100 |
| Public Works Facility | 2 | 3 (6 stalls) | $105,160 | $24,116 | 4.4 | 12,334 |
| Water Treatment Facility | 3 | 1 (2 stalls) | $27,080 | $4,903 | 5.5 | 2,934 |
| Colchester Legion Stadium | 3 | 1 (2 stalls) | $22,600 | $4,159 | 5.4 | 1,951 |
| Douglas Street Recreation Centre | 3 | 2 (4 stalls) | $65,193 | $4,622 | 14.1 | 2,215 |

## Level 3 DC Fast Chargers Implementation Plan

***Future Expansion Opportunity (Post 2031):***

Level 2 charging is sufficient for the use case of most of Truro's current fleet vehicles. Level 3 DC fast chargers may be considered in the future at the Truro Police Service and Public Works Facility once the EV fleet has expanded and a regular operational need for rapid charging is demonstrated. It is recommended to defer the installation of these units at this time because of their substantially higher initial capital cost.

**Table 2. ROM costs for Level 2 vs. Level 3 chargers at select facilities.**

| Facility | Level 2 Charging Base ROM ($) | Level 2 + Optional Level 3 Charging ROM ($) | Council Consideration |
|---|---|---|---|
| Truro Police Service | $108,260 | $245,520 | Potential value for high utilization police vehicles. |
| Public Works Facility | $105,160 | $239,430 | Consider only if fleet utilization creates a regular fast-charging need. |

# Implementation Readiness

EastPoint has prepared one full tender-ready set of engineering design drawings including electrical specifications for the EV charging infrastructure identified for each facility. These detailed design packages outline charger locations, required electrical upgrades, panel schedules, wiring and conduit layouts, and installation details needed for permitting, tendering, and construction. This positions the Town with readiness for implementation and allows the design packages to be utilized as supporting documentation for funding applications for EVSE installation.

# Funding Strategy

The Town can use its existing capital funding while pursuing external funding sources for larger bundled fleet and infrastructure investments.

**Table 3. Summary of external funding opportunities.**

| Funding Source | Funding Considerations | Alignment with the Phasing Plan |
|---|---|---|
| Build Communities Strong Fund (BCSF): Community Stream | Automatic municipal allocation (through the Department of Municipal Affairs) with flexibility for eligible capital projects. The Town received a 2026-2027 allocation of $1,116,346. | Most direct source to consider for Phase 1 or other shovel-ready EVSE work since funds are automatically allocated to the Town rather than awarded through a competitive application. |
| Green Municipal Fund (GMF): Municipal Fleet Electrification | Supports ZEV fleet replacement, charging infrastructure, and required building upgrades. Funding includes a combined grant and loan of up to 80% of eligible costs and a multi-step application process. | Strong alignment for a bundled program that combines EV procurement with charging infrastructure. |
| Zero Emission Vehicle Infrastructure Program (ZEVIP) | A previous funding source for EV charging infrastructure. The 2025-2026 pilot intake has closed; however, the Town should continue to monitor the program for future intakes. | Treat as an opportunity to monitor rather than a committed funding source. The pilot program required at least one (1) 100 kW DC fast charger and a 150 kW total project load, which does not align with the recommended near-term implementation strategy. |

## Funding Alignment by Phase

- Phase 1 is the strongest near-term candidate for existing capital funding and BCSF funding because tender-ready designs are completed and the work can proceed without waiting for fleet-wide transition. The GMF should be considered where the Town can bundle vehicle replacement with EVSE installation.
- Phase 2 should be timed with the Public Works access control decision and fleet replacement.
- Phase 3 should remain flexible so projects can be advanced when vehicles are due for replacement, site renewal is planned, or an external funding intake improves the business case.

# 1 INTRODUCTION

## 1.1 Background and Objectives

The Town of Truro is pursuing the electrification of its municipal fleet as part of its Community Energy and Emissions Plan (CEEP) and its broader asset management goals. In September 2025, EastPoint conducted an Options Analysis for the Town of Truro, where existing electrical infrastructure and parking space availability for six selected municipal facilities were assessed to determine their readiness for the electrification of their fleet vehicles. Cost estimates were also presented for required electrical upgrades and charging infrastructure installations as well as GHG reductions estimates through Truro's projected EV fleet transition.

Following the EV Fleet Options Analysis, the Town now aims to shift from a feasibility-level study to a phased, capital-ready plan and design packages for electric vehicle charging infrastructure across six (6) municipal sites. The objective of this project is to build upon the Options Analysis by developing a phasing capital implementation plan which reflects electrical readiness, parking availability, cost effectiveness, and GHG reductions for the electrification of the Town of Truro's municipal fleet vehicles. This report aims to provide the Town with a phasing approach to capital expenditure for the installation of electric vehicle chargers through the consideration of various criteria.

## 1.2 Client Information

**Town of Truro**
695 Prince Street, Truro, NS B2N 1G5
Alison Grant
agrant@truro.ca

# 2 MUNICIPAL FLEET AND FACILITY OVERVIEW

## 2.1 Municipal Fleet Overview

Based on the previously completed EV Fleet Options Analysis, a subset of the fleet has been identified as suitable candidates for electrification in the near term. These vehicles generally fall within light-duty classifications that have commercially available electric equivalents and operating profiles compatible with overnight or workplace charging.

Fleet utilization data collected through GPS tracking was used to determine each vehicle's primary parking location and typical daily travel distance. This information helped identify which municipal facilities would require electric vehicle charging infrastructure to support the transition to electric fleet vehicles.

In total, approximately 20 vehicles across six (6) municipal facilities were identified as electrifiable under the current operational and infrastructure conditions. The Town of Truro currently does not have any EVs in its fleet portfolio. This analysis assumes that the Town gradually transitions its existing fuel-powered fleet to EVs over time.

## 2.2 Municipal Facility Overview

Six municipal facilities were assessed to determine their readiness to support fleet electrification and the installation of Electric Vehicle Supply Equipment (EVSE). These facilities represent the primary locations where municipal fleet vehicles are parked for extended periods and where charging infrastructure could be integrated into existing operations.

The facilities included in the assessment are:

- Truro Town Hall.
- Truro Police Service.
- Public Works Facility.
- Water Treatment Facility.
- Colchester Legion Stadium.
- Douglas Street Recreation Centre.

Each site was evaluated based on key factors that influence EV infrastructure deployment, including:

- Existing electrical service capacity.
- Available parking configuration.
- Proximity of parking areas to electrical distribution equipment.
- Compatibility with fleet parking patterns.

The assessment determined that all six facilities could support EV charging infrastructure with varying levels of electrical upgrades and site modifications.

# 3 CHARGING INFRASTRUCTURE PROGRAM

Based on the fleet distribution and facility assessments, Level 2 dual-port charging infrastructure is feasible at each of the six municipal facilities to support overnight or workplace fleet charging. Level 2 chargers are commonly used for municipal fleets as they are the slowest reliable chargers that still meet operational needs while being less cost intensive. Due to their high upfront capital costs, Level 3 DC fast chargers are only recommended for sites with high load capacities and where quick vehicle turnaround is critical.

**Table 4** outlines the proposed number of charging stations based on the number of fleet vehicles that acquire consistent long overnight dwell hours at each facility, with the exception of an additional charging station at Douglas Street Recreation Centre to accommodate anticipated additional fleet vehicles at the site as informed by building staff members.

Although the proposed Level 2 chargers are sufficient to service the vehicles, several facilities have sufficient load capacities to accommodate a Level 3 DC fast charger for emergency use. Based on feedback from the Town, it was determined that the Truro Police Service and Public Works Facility could potentially benefit from Level 3 DC fast chargers in the future. A Level 3 DC fast charger could be particularly advantageous at the Truro Police Service if the Town plans to procure electric police interceptors in the future, since the high utilization of mission-critical police vehicles may not allow for long dwell periods. Similarly, due to the high utilization of the Public Works Facility and anticipated number of eligible vehicles that would park there for long hours, this makes the facility a suitable candidate for a Level 3 charging station.

**Table 4. Proposed Number of Charging Stations Per Facility**

| Facility Name | Level 2 Charging Stations | Optional Level 3 Charging Stations |
|---|---|---|
| Truro Town Hall | 3 (6 stalls) | - |
| Truro Police Service | 3 (6 stalls) | 1 |
| Water Treatment Facility | 1 (2 stalls) | - |
| Public Works Facility | 3 (6 stalls) | 1 |
| Colchester Legion Stadium | 1 (2 stalls) | - |
| Douglas Street Recreation Centre | 2 (4 stalls) | - |

# 4 TECHNICAL FEASIBILITY ASSESSMENT

## 4.1 Prioritization Matrix

A two (2)-stage prioritization matrix framework was utilized to develop the phasing plan. Step 1 involves a screening based on technical parameters, while Step 2 involves a ranked system based on financial viability and GHG reduction potential.

### 4.1.1 STEP 1: TECHNICAL FEASIBILITY SCREENING

Using data collected from the Options Analysis, all six (6) facilities were assigned ratings based on criteria for electrification readiness, including electrical capacity, space availability, and existing infrastructure complexity as shown in **Table 5**.

**Table 5. Technical Feasibility Rating Summary Per Facility**

| Facility | Electrical Capacity | Space Availability | Infrastructure Complexity | Feasible for Near-Term EVSE Installation |
|---|---|---|---|---|
| Public Works Facility | High | Moderate | Moderate | Conditional |
| Water Treatment Facility | Very High | Good | Low | Yes |
| Truro Police Service | High | Good | Moderate | Yes |
| Truro Town Hall | Moderate | Good | Moderate | Yes |
| Colchester Legion Stadium | Moderate | Good | Moderate | Yes |
| Douglas Street Recreation Centre | Low | Good | High | Conditional |

The rationale behind the ratings assigned above involves the following:

- Electrical capacity was rated based on the spare load capacity on the existing electrical service at each facility.
- Space availability reflects the existing parking layout at each facility.
- Infrastructure complexity reflects the upgrades required for both the electrical service and the parking layout at each facility.

### 4.1.2 STEP 2: RANKED METRICS

Based on fleet utilization data captured in the Options Analysis, a financial assessment was conducted to evaluate annual operational savings and GHG emissions savings. Error! Reference source not found.**Table 6** below ranks the six (6) facilities in order of higher to lower priority for EVSE installation, solely based on simple payback and GHG savings. This technical ranking helped inform the final phasing plan; however, ease of

installation of EVSE at the various sites was a critical factor to determine the best order of implementation. The ROM costs include those associated with the installation of Level 2 chargers, with the costs in brackets reflecting the additional capital required for the installation of Level 3 chargers at two (2) of the facilities. The simple payback included in brackets reflects the implementation of both Level 2 and Level 3 chargers at two of the facilities. A detailed breakdown of these calculations is included in **Appendix A** for reference.

*The operational cost savings presented below assume that all fleet vehicles identified as suitable for electrification are replaced with equivalent electric vehicles over the implementation period. In practice, fleet replacement will occur incrementally based on vehicle condition, capital budgets, and operational requirements. As a result, the annual operational savings in this report represent the maximum savings potential once the full eligible fleet has transitioned to EVs. Actual savings realized in the near term will increase progressively as additional vehicles are replaced and charging infrastructure is deployed.*

**Table 6. Cost and Savings Ranking for EVSE at Assessed Facilities**

| Facility Name | ROM Capital Cost ($) | Annual Operational Savings ($) | Simple Payback (years) | Annual GHG Savings (kg) | Rank |
|---|---|---|---|---|---|
| Public Works Facility | 105,160 (134,270) | 24,116 | 4.4 (9.9) | 12,334 | 1 |
| Truro Police Service | 108,260 (137,260) | 15,141 | 7.2 (16.2) | 8,100 | 2 |
| Truro Town Hall | 107,020 | 10,304 | 10.4 | 4,476 | 3 |
| Water Treatment Facility | 27,080 | 4,903 | 5.5 | 2,934 | 4 |
| Colchester Legion Stadium | 22,600 | 4,159 | 5.4 | 1,951 | 5 |
| Douglas Street Recreation Centre | 65,193 | 4,622 | 14.1 | 2,215 | 6 |

*The cost in brackets represents the estimated incremental cost for installing an optional Level 3 charger. This reflects the additional equipment required for installation of a Level 3 charger.

# 5 FINANCIAL ANALYSIS

## 5.1 Analysis Assumptions

The following Section outlines the input assumptions used to compute fuel and cost savings, as well as GHG emissions reductions. A detailed breakdown of these calculations can be found in **Appendix A**.

### 5.1.1 FUEL AND ELECTRICITY RATES

The fuel type of the vehicles assessed is regular gasoline (fuel type X). As per the Nova Scotia Energy Board utility pricing, $1.63 was previously used for regular unleaded gasoline in Zone 1 as of March 10, 2026. For this final report, the cost of regular unleaded gasoline has increased to approximately $1.94 as of July 24, 2026.[1]

An electricity rate of $0.18 was previously used primarily based on NRCan's guide on fleet electrification[2] that aligns with a blended rate estimate of current Nova Scotia Power (NSP) tariff structures. For this final report, two (2) different electricity rates were used to provide more accurate electricity costs depending on the type of facility. Based on utility bills provided by the Town, it was determined that the Water Treatment Facility follows a 22M rate code (Medium Industrial Tariff), while the remaining five facilities follow a 11M rate code (Commercial General Demand Tariff).

Under the 22M rate code, a single energy charge of $0.11367 is used.[3] Whereas for an 11M rate code, an energy charge of $0.15738 is used for the first 200 kWhs per month per kW of maximum demand (Block 1), and $0.12674 is used for all additional kWhs (Block 2)[3]. For the purpose of this study, the incremental electricity costs for facilities served under NSP rate 11M were estimated using the Block 2 energy rate. This assumes that existing facility electricity consumption already exceeds the Block 1 energy threshold, such that additional EV charging represents marginal energy consumption billed at the lower Block 2 rate. Additionally, incremental demand charges were assumed to be zero, based on the assumption of managed overnight charging and that EV charging may not increase a facility's peak demand. Potential changes to monthly demand charges were not included and would require interval demand data or a detailed charging load analysis to determine when a facility's peak demand occurs and whether EV charging will increase it.

The electricity consumption intensity value was updated to reflect the 2026 publication under Environment and Climate Change Canada (ECCC), where a value of 581 $gCO_2e/kWh$ was used to quantify current GHG emissions for Nova Scotia in 2026.[4] For this final report, an updated value of 457 $gCO_2e/kWh$ was used to quantify projected GHG reductions for 2030 based on similar studies conducted by EastPoint. This allows GHG savings

[1] https://nserbt.ca/nseb/mandates/gasoline-diesel-pricing/gasoline-diesel-prices-zone-map#/zone_1
[2] https://natural-resources.canada.ca/energy-efficiency/transportation-energy-efficiency/personal-vehicles/understanding-tables
[3] https://www.nspower.ca/your-business/save-money-energy/business-rates?utm_source=chatgpt.com
[4] https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/output-based-pricing-system/federal-greenhouse-gas-offset-system/emission-factors-reference-values.html

to not be overestimates and provides a more realistic representation of Nova Scotia's anticipated electric grid intensity by 2030.

### 5.1.2 FLEET UTILIZATION DATA

Fleet utilization data collected through the Town of Truro's GPS tracking system formed the basis of the fleet electrification and financial analysis. GPS data was used to determine each vehicle's average daily Vehicle Kilometres Travelled (VKT), primary parking location, and longest daily dwell event (the time duration in which a vehicle was parked for the day and only used again the following day). Where GPS data could not be directly linked to a vehicle, the representative utilization profile was assumed to reflect that of other vehicles in its classification category.

To estimate the annual fuel consumption for each vehicle, these operating characteristics were combined with fuel consumption data (L/km), which was obtained using NRCan's fuel consumption ratings search tool depending on each vehicle's classification, make, and model.[5] Additionally, the charging requirements for each vehicle informed the necessary electricity consumption and GHG emissions. The resulting vehicle-level consumption calculations were then aggregated by facility to assess EV charging infrastructure requirements as well as to estimate operational savings.

## 5.2 Cost Savings and Capital Expenditure

The total operating cost savings associated with fuel and maintenance savings of EVSE implementation have been estimated for each of the electrifiable fleet vehicles. Fuel cost savings were calculated based on utility rates and fuel utilization data as outlined in **Section 5.1** above. A detailed breakdown of these calculations can be found in **Appendix A**. The sections below outline the rationale behind the maintenance cost savings as well as a summary of the capital cost of EVSE installation.

### 5.2.1 MAINTENANCE COST SAVINGS

Recent reports show that maintenance costs for EVs are about 25% - 50% of the maintenance costs for Internal Combustion Engine (ICE) vehicles.[6] For this study, it was assumed that maintenance costs for EVs are 40% lower than those of ICE vehicles to encompass the different vehicle classifications and their different maintenance requirements. The estimated maintenance costs for EVs in this model did not account for battery replacement as recent data shows that EV batteries can remain functional and last beyond the vehicle's expected service life.[7] **Table 7** outlines the estimated annual maintenance cost for each ICE vehicle classification assessed in this study.[8]

[5] https://fcr-ccc.nrcan-rncan.gc.ca/en/Search

[6] https://cdn.halifax.ca/sites/default/files/documents/city-hall/regional-council/211123rc1522.pdf

[7] https://www.geotab.com/blog/ev-battery-health/

[8] https://www.fleetmaintenance.com/equipment/battery-and-electrical/article/21250369/breakdown-of-ev-maintenance-expenses

**Table 7. Estimated Maintenance Costs for Different ICE Vehicles**

| Vehicle Classification | Estimated Annual ICE Vehicle Maintenance Cost ($/year) |
|---|---|
| Pickup Truck | $1,200 |
| SUV | $1,000 |
| Cargo Van | $1,400 |

### 5.2.2 CAPITAL COST SUMMARY

The overall ROM upfront capital costs for each site were broken down into costs for civil work and the charging units as shown in **Table 8** below. A more detailed breakdown of each cost element can be found in **Appendix B** for reference. The cost of one Level 3 DC fast charger is substantially greater than that of a Level 2 charger, making it a less financially viable option for near-term implementation. Civil work also accounts for a large share of the capital costs with additional elements required for the Level 3 chargers. Scopes of work for the installation of EVSE include the following:

- Concrete pads and bollards.
- Wiring and cabling.
- Conduits and conduit fittings.
- Step-up/step-down transformer.
- Electrical cabinets and enclosures.
- Receptacles.
- Circuit breakers.
- New panelboard (if required).

**Table 8. EVSE ROM Capital Cost Breakdown Summary Per Facility**

| Facility Name | Level 2 EVSE Civil Work Capital Cost ($) | Level 2 EVSE Units Capital Costs ($) | Level 3 EVSE Civil Work Capital Costs ($) | Level 3 EVSE Units Capital Costs ($) |
|---|---|---|---|---|
| Public Works Facility | 58,660 | 30,000 | 41,280 | 60,000 |
| Water Treatment Facility | 11,580 | 10,000 | - | - |
| Truro Police Service | 61,760 | 30,000 | 44,270 | 60,000 |
| Truro Town Hall | 60,520 | 30,000 | - | - |
| Colchester Legion Stadium | 7,100 | 10,000 | - | - |
| Douglas Street Recreation Centre | 34,200 | 20,000 | - | - |
| **Total** | **233,820** | **130,000** | **85,550** | **120,000** |

# 6 GHG EMISSIONS IMPACT

Annual GHG emissions pre and post electrification of the fleet vehicles were also computed per facility using the data collected from the Options Analysis. A detailed breakdown of these calculations can be found in **Appendix A**. As Nova Scotia's electric grid remains one of Canada's most carbon-intensive grids, no significant GHG emissions would be realized through short-term electrification of fleet vehicles. Since the savings improve over time through grid decarbonization under the Province's Clean Power Plan, GHG savings shown in **Table 9** are based on projected 2030 emissions for Zero-Emission Vehicles (ZEV).

*The GHG savings presented assume all eligible light-duty municipal fleet vehicles are replaced with equivalent EVs. The GHG savings shown therefore represent the long-term emissions reduction potential once the Town's eligible fleet has fully transitioned to EVs.*

**Table 9. GHG Savings Per Facility**

| Facility Name | Annual Current GHG Emissions (kg) | Annual ZEV Fleet GHG Emissions (2026 Emissions) (kg) | Annual ZEV Fleet GHG Emissions (2030 Emissions) (kg) | Annual GHG Savings (kg) |
|---|---|---|---|---|
| Public Works Facility | 32,212 | 25,272 | 19,878 | 12,334 |
| Water Treatment Facility | 6,385 | 4,387 | 3,451 | 2,934 |
| Truro Police Service | 19,728 | 14,783 | 11,628 | 8,100 |
| Truro Town Hall | 12,067 | 9,650 | 7,591 | 4,476 |
| Douglas Street Recreation Centre | 5,537 | 4,223 | 3,322 | 2,215 |
| Colchester Legion Stadium | 4,820 | 3,647 | 2,869 | 1,951 |

**Figure 1** below visually illustrates the substantial long-term GHG savings as the electric grid decarbonizes.

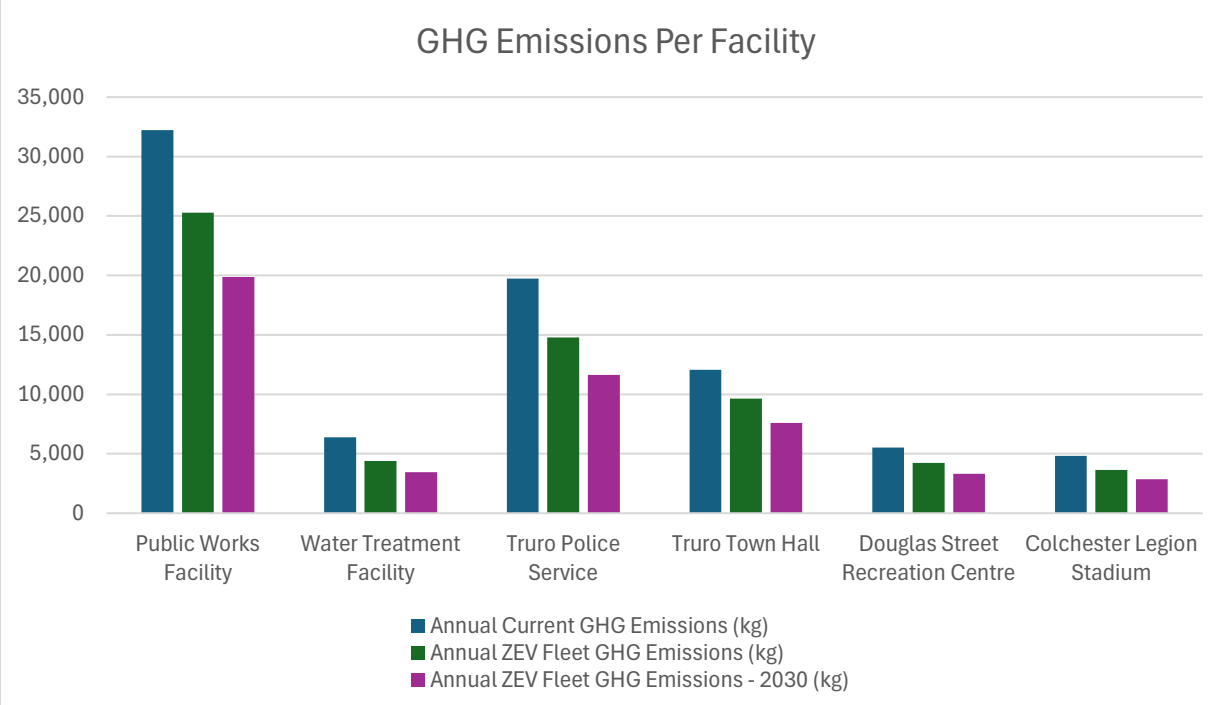



**Figure 1. Current and Future GHG Emissions Per Facility**

# 7 GRANT OPPORTUNITIES

## 7.1 Green Municipal Fund (GMF)

The Green Municipal Fund is administered through the Federation of Canadian Municipalities (FCM) and includes funding for both feasibility-level studies and capital projects for ZEV transition.[9] This program is dedicated to municipal fleets, making the Town of Truro's fleet transition a prime candidate for this funding opportunity. Funded capital projects include the replacement of ICE vehicles with ZEVs, installation of ZEV charging infrastructure, and implementation of required building upgrades.[9] The awarded funding includes a combined grant and loan of up to 80% of eligible costs and can range from $1 m to $10 m, with a grant contribution of up to 15% of the loan amount.[9] Applications for the GMF are currently open and accepted year-round; however, the Town of Truro is encouraged to apply early to secure funding for EVSE infrastructure implementation. This funding program involves a multi-step application process that requires various supporting documentation; therefore, it is further encouraged to apply early.

## 7.2 Zero Emission Vehicle Infrastructure Program (ZEVIP)

The Zero Emission Vehicle Infrastructure Program is a program administered by NRCan and includes funding for the installation of EV chargers.[10] This program is set to continue until March 31, 2027.[10] This stream is intended for owners/operators of ZEV infrastructure and aligns with the Town's fleet vehicles electrification plans and eligibility. A pilot program was launched in November 2025 and closed on March 20, 2026, where EV charging infrastructure funding was only eligible for high-priority areas, which the Town of Truro was not part of.[10] 50% of the total project costs are covered under this program, with a maximum award of $2 m per project (only 2 project proposals permitted).[10] The ZEVIP also requires the project to include the installation of at least one 100 kW Level 3 DC fast charger in combination with additional EV chargers for a total load of 150 kW.[10] NRCan has not announced the next intake for the program; however, it is encouraged that the Town of Truro applies to the ZEVIP once a second intake or application is launched.

## 7.3 Build Communities Strong Fund

The Build Communities Strong Fund (BCSF) (previously known as the Canada Community-Building Fund) is a federal program launched in 2026 that supports various infrastructure projects across Canada. There are three (3) main streams under the BCSF: Provincial and Territorial Stream, Direct Delivery Stream, and Community Stream.[11] For the Town of Truro, the Community Stream aligns more closely with the Town's objectives of transitioning to a net-zero municipal fleet. The Build Communities Strong Fund Community stream provides funding for municipal infrastructure and capacity-building projects including those that advance community resilience and Canada's net-zero goals. Municipalities are not required to apply for the Build Communities

[9] https://greenmunicipalfund.ca/municipal-fleet-electrification

[10] https://natural-resources.canada.ca/energy-efficiency/transportation-energy-efficiency/zero-emission-vehicle-infrastructure-program

[11] https://housing-infrastructure.canada.ca/bcsf-fbcf/index-eng.html

Strong Fund Community stream. The Department of Municipal Affairs administers this program and automatically calculates allocation payments annually and distributes the funding in 2 transfer payments to each municipality.[12] The Town of Truro has received $1,116,346.26 for the 2026 - 2027 allocation under this program.[13] Municipalities have flexibility to direct their annual allocations toward eligible capital projects, making it a favorable funding source to reduce the Town's capital contribution for its municipal fleet electrification project.

[12] https://www.novascotia.ca/build-communities-strong-fund-community-stream-municipalities

[13] https://www.novascotia.ca/sites/default/files/documents/1-3794/build-communities-strong-fund-community-stream-2026-27-municipal-allocations-en.pdf

# 8 IMPLEMENTATION PLAN

## 8.1 Prepare Issued-For-Tender (IFT) Design Packages

EastPoint has prepared one full tender-ready set of engineering design drawings including electrical specifications for the EV charging infrastructure identified for each facility. These detailed design packages outline charger locations, required electrical upgrades, panel schedules, wiring and conduit layouts, and installation details needed for permitting, tendering, and construction. This will ensure readiness for implementation and allow the design packages to be utilized as supporting documentation for funding applications for EVSE installation.

Some facilities may require the installation of access control strategies at their parking sites prior to the implementation of EVSE. For instance, in addition to fencing the front parking area of the Public Works Facility, there are two (2) access control approaches available for the Town. The first option is to install charging stations equipped with Radio-Frequency Identification (RFID)/card access only, allowing charging to be restricted to authorized municipal staff and fleet vehicles while maintaining relatively low installation and operating costs. Alternatively, the Town may choose EV charging stations that provide both RFID/card access and public card payment capabilities. While this option offers greater flexibility by allowing future public or third-party use, it requires additional hardware, communications infrastructure, payment processing software, and ongoing service provider agreements. It also introduces recurring subscription and transaction fees, vendor management requirements, and dependence on a charging network operator, resulting in higher lifecycle costs and increased administrative complexity. EastPoint's tender documents have left both options open for consideration, and the Town can decide on the most viable option on a site-by-site basis.

## 8.2 Project Phasing

Based on the analysis of electrical infrastructure readiness, fleet utilization, capital cost, and projected operating savings, EastPoint recommends a phased implementation of EV charging infrastructure across Truro's municipal facilities. This phasing plan has been revised from the draft report to consider design changes and feedback from the Town regarding operational priorities and potential implementation challenges at the sites.

The recommended approach prioritizes sites that provide the highest operational benefit and lowest infrastructure risk in the near term, while deferring more complex or lower-return installations to later phases.

**Phase 1: Near-Term Implementation (2027 - 2029)**

EastPoint recommends that the Town first proceed with the installation of Level 2 charging infrastructure at the Truro Town Hall and the Truro Police Service. Although the payback periods are longer than some of the other sites, they present higher annual GHG savings. Prioritizing electrification at these facilities will help expand the

Town's EV charging network and support the continued transition of light-duty municipal vehicles to electric alternatives.

The Town Hall serves as a central municipal operations hub with six (6) fleet vehicles based at the site, making it a suitable location to begin supporting the Town's fleet electrification program. The site has sufficient electrical capacity to support the recommended Level 2 charging infrastructure with relatively minor electrical upgrades required. Although future parking configuration changes should be confirmed to accommodate planned accessibility improvements for non-municipal vehicles, the site remains a practical location to establish the Town's initial EV charging network.

Similarly, the Truro Police Service facility supports mission-critical operations where reliable charging infrastructure is essential as electric fleet vehicles are introduced. The existing electrical service has a high spare load capacity to accommodate the proposed Level 2 charging infrastructure and has the potential to support a future Level 3 DC fast charger. Electrical and civil work for an eventual Level 3 DC fast charger could be done at the same time Level 2 stations are installed for an incremental cost, meaning that the site would be prepared to install a future DC fast charger when it makes sense operationally.

**Phase 2: Operational Fleet Expansion (2029 - 2031)**

The second phase should focus on the Public Works Facility, where the implementation of EV charging infrastructure should be coordinated with the replacement of Public Works fleet vehicles with electric alternatives and should follow the establishment of controlled access to the fleet parking area.

The facility's existing electrical service can readily support the proposed Level 2 charging infrastructure; however, there is limited space for EVSE installation in the rear compound of the facility, meaning the most likely location for installation is in the front of the building, which does not have access control, creating risk if municipal fleet vehicles are left to charge overnight unsupervised. Therefore, it was identified that the installation of EVSE may only make sense when combined with installation of fencing, gates or other means of securing the front parking area. Although the Public Works Facility demonstrated the highest projected annual operational savings and GHG reduction potential, it is necessary for the Town to first determine its long-term charging access strategy prior to installing any EV charging infrastructure on site.

**Phase 3: Longer-Term Implementation or Strategic Opportunities (2031+)**

The Water Treatment Facility, the Colchester Legion Stadium, and the Douglas Street Recreation Centre should be considered strategic implementation opportunities that coincide with replacement of site-based vehicles with EVs. These sites have fewer vehicles based at their sites and therefore have lower potential to reduce fleet-based GHG emissions.

Additionally, the existing electrical system at the Douglas Street Recreation Centre is operating near its available capacity. Previous site investigations identified limitations within the existing distribution equipment that would require electrical infrastructure upgrades before EV charging loads can be accommodated. As a result, the Douglas Street Recreation Centre also has the longest payback period. Therefore, EV charging

infrastructure at this facility should be considered only as part of a future electrical service or distribution system renewal project.

**Future Expansion: DC Fast Charging**

Installation of Level 3 DC fast chargers at the Public Works Facility and the Truro Police Service should be considered as future expansion projects once the municipal EV fleet has increased and operational requirements for rapid charging become clearer. Both sites have the capacity to accommodate fast chargers, but these ESVE devices have a high installation cost and should only be installed if the Town feels they would be used on a regular basis to support regular operation of the municipal fleet.

Level 2 charging infrastructure is sufficient to support the current fleet electrification strategy, and deferring DC fast charging reduces near-term capital expenditure while maintaining flexibility for future upgrades.

**Overall Recommendation**

EastPoint recommends that the Town of Truro proceed with a phased capital implementation program beginning with the Truro Town Hall and the Truro Police Service, with installations at the remaining sites to proceed as funding and fleet replacement schedules permit. This phased approach allows the Town to:

- Begin realizing operational savings from fleet electrification.
- Minimize infrastructure risk in early deployments.
- Align EV charging investments with fleet replacement timelines and available funding opportunities.

# 9 CLOSING

We trust the information contained in this report satisfies your requirements, and aids in any future decision-making processes. Should you have any questions regarding any information presented in this report, please do not hesitate to contact the undersigned.

**EASTPOINT**

Prepared by

**Mariam Abdeen, EIT, EMIT**
Climate & Energy Analyst
P: 902.333.6568
mariam.abdeen@eastpoint.ca

Reviewed by

**Kirk Herman, P. Eng., CEM, LEED AP BD+C.**
Senior Engineer, Energy and Infrastructure Advisory
P: 902.340.1818
kirk.herman@eastpoint.ca

# APPENDIX A

## Fuel, Cost, and GHG Savings Assessment

---

**Town of Truro** | September 21, 2026
Town of Truro EV Fleet Capital Implementation & Phasing Plan

EASTPOINT

| GPS Tracker | Department | Parking Location | Vehicle Type | Average Longest Daily Dwell Event Duration [h] | Daily Dwell Event Schedule | Combined (L/100 km) | Daily VKT (km) | Fuel/year (L) | Fuel (ekWh) | Fuel Cost/Year ($) | CO2 emissions (g/km) | Current CO2 Emissions /Year (kg) | Replacement Vehicle Classification | ZEV Fleet Electricity Consumption (kWh) | ZEV Fleet Electricity Cost/Year ($) | ZEV Fleet CO2 Emissions /Year (kg) | ZEV Fleet CO2 Emissions /Year (2030) (kg) | Annual CO2 Emissions Savings (kg) | Annual Fuel Cost Savings ($) | Annual Maintenance Cost Savings ($) | Total Annual Operational Savings ($) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PWT-12 | Public Works - Light Trucks | PWF | 2016ChevroletCityExpress | 18 | Nighttime | 9.4 | 27 | 933 | 8,306 | 1,811 | 220 | 2,184 | Cargo Van | 5,149 | 653 | 2,991 | 2353 | -169 | 1159 | 560 | 1719 | |
| PWT-14 | Public Works - Light Trucks | PWF | 2015FordF-1504x4 | 18 | Nighttime | 12 | 49 | 2,151 | 19,140 | 4,174 | 276 | 4,946 | Pickup Truck | 6,316 | 801 | 3,670 | 2887 | 2060 | 3374 | 480 | 3854 | |
| PWT-35 | Public Works - Light Trucks | PWF | 2022ChevroletSilverado | 14 | Nighttime | 11.6 | 70 | 2,964 | 26,378 | 5,753 | 274 | 7,001 | Pickup Truck | 9,005 | 1,141 | 5,232 | 4115 | 2885 | 4611 | 480 | 5091 | |
| TBD | Public Works - Light Trucks | PWF | 2024FordF-150 | 17 | Nighttime | 11.3 | 49 | 2,013 | 17,914 | 3,907 | 266 | 4,738 | Pickup Truck | 6,278 | 796 | 3,647 | 2869 | 1869 | 3111 | 480 | 3591 | |
| TBD | Public Works - Light Trucks | PWF | 2023FordF-150 | 17 | Nighttime | 10.7 | 49 | 1,906 | 16,962 | 3,699 | 252 | 4,489 | Pickup Truck | 6,278 | 796 | 3,647 | 2869 | 1620 | 2904 | 480 | 3384 | |
| PWW-31 | Water Treatment Facility | PWF | 2016GMCSierra | 17 | Nighttime | 12.7 | 81 | 3,773 | 33,582 | 7,324 | 298 | 8,854 | Pickup Truck | 10,472 | 1,327 | 6,084 | 4786 | 4068 | 5997 | 480 | 6477 | |
| WTP-19 | Water Treatment Facility | WTF | 2018ChevroletSilverado | 15 | Nighttime | 12.7 | 59 | 2,721 | 24,217 | 5,282 | 298 | 6,385 | Pickup Truck | 7,551 | 858 | 4,387 | 3451 | 2934 | 4423 | 480 | 4903 | |
| TBD | Truro Police Service | TPS | 2021ChevroletBlazer | 16 | Nighttime | 9.4 | 50 | 1,716 | 15,268 | 3,330 | 221 | 4,033 | SUV | 5,089 | 645 | 2,957 | 2326 | 1708 | 2685 | 400 | 3085 | Assumed 16 Hour Daily Dwell Time and 50 Daily VKT. |
| TBD | Truro Police Service | TPS | 2018DodgeGrand Caravan | 16 | Nighttime | 11.8 | 50 | 2,154 | 19,166 | 4,180 | 276 | 5,037 | SUV | 5,089 | 645 | 2,957 | 2326 | 2711 | 3535 | 400 | 3935 | Assumed 16 Hour Daily Dwell Time and 50 Daily VKT. |
| TBD | Truro Police Service | TPS | 2016ChevroletEquinox | 16 | Nighttime | 9.1 | 50 | 1,661 | 14,781 | 3,224 | 214 | 3,906 | SUV | 5,089 | 645 | 2,957 | 2326 | 1580 | 2579 | 400 | 2979 | Assumed 16 Hour Daily Dwell Time and 50 Daily VKT. |
| TBD | Truro Police Service | TPS | 2021NissanRogue | 16 | Nighttime | 8.1 | 50 | 1,478 | 13,156 | 2,869 | 189 | 3,449 | SUV | 5,089 | 645 | 2,957 | 2326 | 1124 | 2224 | 400 | 2624 | Assumed 16 Hour Daily Dwell Time and 50 Daily VKT. |
| TBD | Truro Police Service | TPS | 2023HondaCR-V | 16 | Nighttime | 7.8 | 50 | 1,424 | 12,669 | 2,763 | 181 | 3,303 | SUV | 5,089 | 645 | 2,957 | 2326 | 978 | 2118 | 400 | 2518 | Assumed 16 Hour Daily Dwell Time and 50 Daily VKT. |
| Corp Services 1 - RAV4 | Admin/Bylaw/Building Inspection | TTH | 2015ToyotaRav4 | 15 | Nighttime | 8.9 | 16 | 533 | 4,742 | 1,034 | 205 | 1,227 | SUV | 1,669 | 212 | 970 | 763 | 464 | 823 | 400 | 1223 | |
| Corp Services 2 - Pilot | Admin/Bylaw/Building Inspection | TTH | 2013HondaPilot | 17 | Nighttime | 11.5 | 10 | 403 | 3,586 | 782 | 265 | 929 | SUV | 977 | 124 | 568 | 447 | 482 | 658 | 400 | 1058 | |
| Planning - Building Inspector | Admin/Bylaw/Building Inspection | TTH | 2017GMCTerrain | 17 | Nighttime | 9.4 | 42 | 1,444 | 12,856 | 2,804 | 221 | 3,396 | SUV | 4,285 | 543 | 2,489 | 1958 | 1438 | 2261 | 400 | 2661 | |
| Planning - By-Law | Admin/Bylaw/Building Inspection | TTH | 2021ChevroletEquinox | 18 | Nighttime | 8.4 | 41 | 1,248 | 11,106 | 2,422 | 198 | 2,941 | SUV | 4,142 | 525 | 2,407 | 1893 | 1048 | 1897 | 400 | 2297 | |
| TBD | Admin/Bylaw/Building Inspection | TTH | 2023MazdaCX-54WD | 17 | Nighttime | 9 | 27 | 894 | 7,952 | 1,734 | 209 | 2,075 | SUV | 2,768 | 351 | 1,608 | 1265 | 810 | 1383 | 400 | 1783 | |
| TBD | Admin/Bylaw/Building Inspection | TTH | 2025HondaCR-VHybrid | 17 | Nighttime | 6.4 | 27 | 635 | 5,655 | 1,233 | 151 | 1,499 | SUV | 2,768 | 351 | 1,608 | 1265 | 234 | 882 | 400 | 1282 | |
| PRC-7 | Parks, Recreation, & Culture | DSRC | 2023ChevroletSilverado | 18 | Nighttime | 12 | 28 | 1,235 | 10,993 | 2,397 | 281 | 2,892 | Pickup Truck | 3,628 | 460 | 2,108 | 1658 | 1234 | 1938 | 480 | 2418 | |
| PRC-1 | Parks, Recreation, & Culture | DSRC | 2022FordF-150 | 17 | Nighttime | 10.9 | 28 | 1,126 | 10,021 | 2,185 | 256 | 2,644 | Pickup Truck | 3,641 | 461 | 2,115 | 1664 | 981 | 1724 | 480 | 2204 | |
| PRC-3 | Parks, Recreation, & Culture | CLS | 2021FordF-150 | 16 | Nighttime | 10.8 | 18 | 714 | 6,350 | 1,385 | 253 | 1,671 | Pickup Truck | 2,328 | 295 | 1,353 | 1064 | 607 | 1090 | 480 | 1570 | |
| PRC-8 | Parks, Recreation, & Culture | CLS | 2024ChevroletSilverado | 16 | Nighttime | 12 | 31 | 1,345 | 11,967 | 2,610 | 281 | 3,149 | Pickup Truck | 3,949 | 501 | 2,295 | 1805 | 1344 | 2109 | 480 | 2589 | |

# APPENDIX B

## Capital Cost Breakdown for EVSE Installation

---

**Town of Truro** | September 21, 2026
Town of Truro EV Fleet Capital Implementation & Phasing Plan

EASTPOINT

## PUBLIC WORKS FACILITY ROM CAPITAL COSTS

| Item | Cost | Notes |
|---|---|---|
| Dry-Type Transformers up to 600 V Primary | $ 12,000 | 45 kVA 600:120/208 V Step-Down Transformer |
| Dry-Type Transformers up to 600 V Primary | $ (20,000) | 45 kVA 600:480 V Step-Down Transformer |
| Cast-in-Place Concrete | $ (3,000) | Concrete Pads & Bollards |
| Enclosed Switches and Circuit Breakers | $ 650 | 60 A Disconnect Switch |
| Electric Vehicle Charging Units | $ 30,000 (90,000) | Level 2 EVSE (Level 3 EVSE) |
| Wires and Cables (0 - 1,000 V) | $ 2,380 (2,640) | Branch Circuit Wiring |
| Conduits, Conduit Fastenings, and Conduit Fittings | $ 11,600 (12,470) | Branch Circuit Raceways |
| Panelboards: Breaker Type | $ 6,000 | 120/208V Panel |
| Electrical Cabinets and Enclosures | $ 1,140 | Communications Gateway |
| Wiring Devices | $ 240 | Receptacle |
| Moulded Case Circuit Breakers | $ 3,830 (6,330) | 6 x 40 A - 2 P, 15 A - 1 P (70 A - 3 P, Disconnect Switch) |
| ***Sub-Total Electrical:*** | **$ 67,840 (154,470)** | |
| **General Project Costs** | | |
| ***Sub-Total:*** | **$ 67,840 (154,470)** | |
| General Conditions: **10%** | **$ 6,784 (15,447)** | |
| Construction O&P Cost: **15%** | **$ 10,176 (23,171)** | |
| Contingency: **30%** | **$ 20,352 (46,341)** | |
| **TOTAL:** | **$ 105,160 (239,430)** | Rounded up to nearest $10 |

*The cost in brackets represents the estimated total for both the Level 2 chargers and an optional Level 3 charger. This reflects the additional equipment required for installation of a Level 3 charger.

## WATER TREATMENT FACILITY ROM CAPITAL COSTS

| Item | Cost | Notes |
|---|---|---|
| Cast-in-Place Concrete | $ 4,000 | Concrete Pads & Bollards |
| Electric Vehicle Charging Units | $ 10,000 | Level 2 EVSE |
| Wires and Cables (0 - 1,000 V) | $ 610 | Branch Circuit Wiring |
| Conduits, Conduit Fastenings and Conduit Fittings | $ 880 | Branch Circuit Raceways |
| Electrical Cabinets and Enclosures | $ 1,140 | Communications Gateway |
| Wiring Devices | $ 240 | Receptacle |
| Moulded Case Circuit Breakers | $ 600 | 2 x 40 A - 2 P, 15 A - 1 P (70 A - 3 P, Disconnect Switch) |
| ***Sub-Total Electrical:*** | **$ 17,470** | |
| **General Project Costs** | | |
| ***Sub-Total:*** | **$ 17,470** | |
| General Conditions: | **10%** | **$ 1,747** |
| Construction O&P Cost: | **15%** | **$ 2,621** |
| Contingency: | **30%** | **$ 5,241** |
| **TOTAL:** | **$ 27,080** | Rounded up to nearest $10 |

## TRURO POLICE SERVICE ROM CAPITAL COSTS

| Item | Cost | Notes |
|---|---|---|
| Cast-in-Place Concrete | $ 12,000 (16,000) | Concrete Pads & Bollards |
| Electric Vehicle Charging Units | $ 30,000 (90,000) | Level 2 EVSE (Level 3 DCFC) |
| Wires and Cables (0 - 1,000 V) | $ 5,080 (6,240) | Branch Circuit Wiring |
| Conduits, Conduit Fastenings and Conduit Fittings | $ 7,940 (8,340) | Branch Circuit Raceways |
| Dry-Type Transformers up to 600 V Primary | $ (20,000) | 75 kVA 208:480V Step-Up Transformer |
| Panelboards: Breaker Type | $ 8,000 | 120/208V Panel |
| Electrical Cabinets and Enclosures | $ 1,140 | Communications Gateway |
| Wiring Devices | $ 240 | Receptacle |
| Moulded Case Circuit Breakers | $ 2,440 (5,440) | 6 x 40 A - 2 P, 15 A - 1 P, 225 A - 3 P (2 x Disconnect Switches) |
| Excavating, Trenching and Backfilling | $ 3,000 | Direct Buried Ducts to Chargers |
| ***Sub-Total Electrical:*** | **$ 69,840 (158,400)** | |
| **General Project Costs** | | |
| ***Sub-Total:*** | **$ 69,840 (158,400)** | |
| General Conditions: **10%** | **$ 6,984 (15,840)** | |
| Construction O&P Cost: **15%** | **$ 10,476 (23,760)** | |
| Contingency: **30%** | **$ 20,952 (47,520)** | |
| **TOTAL:** | **$ 108,260 (245,520)** | Rounded up to nearest $10 |

*The cost in brackets represents the estimated total for both the Level 2 chargers and an optional Level 3 charger. This reflects the additional equipment required for installation of a Level 3 charger.

## TRURO TOWN HALL ROM CAPITAL COSTS

| Item | Cost | Notes |
|---|---|---|
| Cast-in-Place Concrete | $ 12,000 | Concrete Pads & Bollards |
| Electric Vehicle Charging Units | $ 30,000 | Level 2 EVSE |
| Wires and Cables (0 - 1,000 V) | $ 3,540 | Branch Circuit Wiring |
| Conduits, Conduit Fastenings and Conduit Fittings | $ 3,680 | Branch Circuit Raceways |
| Panelboards: Breaker Type | $ 6,000 | 120/208 V Panel |
| Electrical Cabinets and Enclosures | $ 1,140 | Communications Gateway |
| Wiring Devices | $ 240 | Receptacle |
| Moulded Case Circuit Breakers | $ 2,440 | 6 x 40 A - 2 P, 15 A - 1 P, 125 A - 3 P |
| Excavating, Trenching, and Backfilling | $ 10,000 | Direct Buried Ducts to Chargers |
| ***Sub-Total Electrical:*** | **$ 69,040** | |
| **General Project Costs** | | |
| ***Sub-Total:*** | **$ 69,040** | |
| General Conditions: | **10%** | **$ 6,904** |
| Construction O&P Cost: | **15%** | **$ 10,356** |
| Contingency: | **30%** | **$ 20,712** |
| **TOTAL:** | **$ 107,020** | Rounded up to nearest $10 |

## COLCHESTER LEGION STADIUM ROM CAPITAL COSTS

| Item | Cost | Notes |
|---|---|---|
| Cast-in-Place Concrete | $ - | Concrete Pads & Bollards |
| Electric Vehicle Charging Units | $ 10,000 | Level 2 EVSE |
| Wires and Cables (0 - 1,000 V) | $ 1,300 | Branch Circuit Wiring |
| Conduits, Conduit Fastenings and Conduit fittings | $ 1,300 | Branch Circuit Raceways |
| Electrical Cabinets and Enclosures | $ 1,140 | Communications Gateway |
| Wiring Devices | $ 240 | Receptacle |
| Moulded Case Circuit Breakers | $ 600 | 2 x 40 A - 2 P, 15 A - 1 P |
| Excavating, Trenching and Backfilling | $ - | Direct Buried Ducts to Chargers |
| ***Sub-Total Electrical:*** | **$ 14,580** | |
| **General Project Costs** | | |
| ***Sub-Total:*** | **$ 14,580** | |
| General Conditions: | **10%** | **$ 1,458** |
| Construction O&P Cost: | **15%** | **$ 2,187** |
| Contingency: | **30%** | **$ 4,374** |
| **TOTAL:** | **$ 22,600** | Rounded up to nearest $10 |

## DOUGLAS STREET RECREATION CENTRE CAPITAL COSTS

| Item | Cost | Notes |
|---|---|---|
| Cast-in-Place Concrete | $ 4,000 | Concrete Pads & Bollards |
| Electric Vehicle Charging Units | $ 20,000 | Level 2 EVSE |
| Wires and Cables (0 - 1,000 V) | $ 1,130 | Branch Circuit Wiring |
| Conduits, Conduit Fastenings and Conduit Fittings | $ 1,950 | Branch Circuit Raceways |
| Panelboards: Breaker Type | $ 8,000 | 120/240 V Panel |
| Electrical Cabinets and Enclosures | $ 1,140 | Communications Gateway |
| Wiring Devices | $ 240 | Receptacle |
| Moulded Case Circuit Breakers | $ 600 | 2 x 40A - 2 P, 15 A - 1 P |
| Excavating, Trenching and Backfilling | $ 5,000 | Direct Buried Ducts to Chargers |
| ***Sub-Total Electrical:*** | **$ 42,060** | |
| **General Project Costs** | | |
| ***Sub-Total:*** | **$ 42,060** | |
| General Conditions: | **10%** **$ 4,206** | |
| Construction O&P Cost: | **15%** **$ 6,309** | |
| Contingency: | **30%** **$ 12,618** | |
| **TOTAL:** | **$ 65,193** | Rounded up to nearest $10 |