



MEMORANDUM

DATE: June 16, 2025

TO: Mayor and City Council

FROM: Lon Pluckhahn, City Manager

RE: **Citywide Electric Vehicle Infrastructure Strategy**

CC: Kate Drennan, Transportation Planning Manager, CDD
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This memo provides an update on work underway to develop a Citywide Electric Vehicle Infrastructure Strategy (EV Strategy) to guide publicly available EV charging infrastructure investments, programs and policies to ensure a smooth and equitable transition to electric mobility for all communities, and a five-year implementation plan for City action.

On-road vehicles are Vancouver's single largest source of greenhouse gas emissions contributing to global climate change.¹ Even as the City invests in more walkable neighborhoods and reduced driving overall, shifting vehicles from gasoline and diesel to lower-carbon fuels, like electricity, was shown to be one of the most immediate and impactful actions in meeting our 2040 climate goals.

Project Overview

Directed by the Climate Action Framework and Transportation System Plan, staff are developing an EV Strategy to accelerate transportation electrification. Project deliverables include a business case assessment, prioritization framework and strategy to promote publicly accessible EV charger development, and five-year implementation plan. This work will help enable the City and partners to pursue state and federal grants for EV charging and other transportation electrification efforts.

¹ In 2023, on-road vehicles were the source of 37% of total community-wide greenhouse gas emissions in Vancouver. (City of Vancouver 2023 Greenhouse Gas Inventory)

The EV Strategy will focus on expanding publicly accessible charging for light- and medium-duty vehicles and micromobility², primarily for residential users, commuters, and small businesses. There are a variety of models that cities are taking to promote charger development, from direct ownership and operation of chargers to enabling private development through code updates, incentives and other policy approaches. The project team is evaluating the costs and benefits of each model to make a recommendation.

The City's municipal fleet decarbonization, heavy-duty trucking electrification, and increasing private in-home charging (e.g., Level 2 chargers in single-family residences) are not part of this planning process.

Vancouver Context

Local EV ownership has doubled in the past two years and is expected to grow by 20 percent annually over the next five to ten years according to forecasts for Clark County.³ To serve the Vancouver market in 2030, between 200 and 1,000 additional publicly available Level 2 charging ports and 5 to 15 additional DC Fast Charging (DCFC) ports are needed.⁴ Level 2 chargers provide slower charging suitable for home or workplace use, while DCFC deliver rapid charging ideal for quick top-ups on the go.

Vancouver is currently home to 113 publicly available Level 2 charging ports and 72 DCFC ports. These chargers are concentrated primarily in high traffic areas such as Downtown, along SR500, Vancouver Mall, and near Mill Plain Boulevard east of I-205. With 69 percent of existing publicly available EV charging stations located in commercially zoned areas, residential and multifamily zoned areas have fewer available chargers (only seven and five percent of existing publicly available EV chargers, respectively).

Clark Public Utilities (CPU) has helped fill this gap by providing rebates for Level II chargers to more than 3,300 predominantly residential customers in Clark County. These programs make charging more affordable and convenient for homeowners, but renters and residents of multi-family housing still face significant barriers to charging at home due to landlord restrictions, high installation costs, and parking management complexities.

Charging Infrastructure Forecast and Gaps

Vancouver needs a critical mass of charging infrastructure to encourage more businesses and households to make the switch to EVs.⁵ While most people would prefer to charge their vehicles at home, publicly accessible infrastructure will serve and

² Micromobility refers to small, low-speed vehicles such as bicycles or scooters, including e-bikes and e-scooters, as well as programs that enable people to borrow or rent these vehicles for short-term use.

³ WA EV Coordinating Council, Transportation Electrification Strategy, 2024

⁴ U.S. Department of Energy, Alternative Fuels and Data Center (AFDC), EVI-X tool

⁵ A 2024 report by J.D. Power reported that among shoppers who are “somewhat unlikely” or “very unlikely” to consider an EV, 52% cited a lack of charging station availability as their reason. (2024 U.S. Electric Vehicle Consideration (EVC) Study, J.D. Power, 2024)

promote adoption by different EV users and sectors depending on where it is sited. For example, public “necessity charging” serves drivers that do not have access to charging at home and is located in neighborhoods, near multi-family housing, or at destinations with longer dwell times. “Convenience charging,” in contrast, helps address range anxiety for all drivers, even those who have access at home, and prioritizes density of chargers throughout the community with a mix of Level 2 and DCFC.

In March-April 2025, the project team conducted market research, interviews, and surveys of local business stakeholders and electric vehicle supply equipment (EVSE) companies (e.g. manufacturers of chargers, software, maintenance providers, and developers of public chargers). The following key themes emerged:

- **EVSE companies alone are not going to fill community charging gaps:** EVSE companies see utilities and local governments as the main drivers of EV charger development in mid-sized cities. Only two respondents noted EVSE companies themselves or commercial property owners as main drivers of development. This points to the City taking on a more involved role in charger development.
- **Businesses are interested but need technical assistance and property owner support:** Among Vancouver businesses, property owners, and nonprofits surveyed about EV charging infrastructure, 48 percent would consider it for their business while 33 percent expressed no interest. For many interested in EV chargers, a primary barrier is that they do not own their worksite and are unsure of restrictions from property owners. Other barriers include costs and knowledge of the installation process and finding a reliable and reasonably priced installer. This points to the opportunity for the City to play an enabling role for private development of chargers.
- **Curbside charging should be carefully evaluated based on City priorities:** In the EVSE industry, the public right of way (e.g. curbside charging) is not widely considered a desirable location for EV charger investment due to permitting challenges, utility access, conflicting curbside uses, and lower profitability. However, companies that do see public right of way as desirable noted that it supports equitable access to charging for EV drivers without residential chargers and offers high visibility and accessibility. Based on where chargers are identified as most needed, the project team will work with Parking Services to determine the best use of the curb to achieve our climate, equity, and safety goals.

We will continue to engage our internal cross-department advisory team to evaluate these market gaps and the appropriate role for the City to advance electrification.

Private and public investment will be necessary to meet the expected demand for EV charging by 2030. Building on our understanding of the EV charging market and gaps, the EV Strategy will outline priorities for where and how EV chargers should be developed in Vancouver and actions for the City to help accelerate EV adoption.

Community Engagement and Next Steps

A community-wide survey is currently open until June 30, 2025, to collect input from EV drivers and non-EV drivers about their priorities for charging infrastructure and transportation electrification strategies to benefit Vancouver. This survey is being promoted through City e-newsletters and social media channels, as well as at community events by City staff and community partners participating in the Community Transportation Electrification Cohort.

The Community Transportation Electrification Cohort is a collaborative effort with nonprofits Community in Motion, Odyssey World International Education Services (OWIES), Vietnamese Community of Clark County, Columbia-Willamette Clean Cities Coalition, and Clark Public Utilities to engage historically marginalized and underrepresented communities in Vancouver in the EV Strategy and other local transportation electrification planning efforts. The Cohort has been working together since February to build organizational capacity to co-create recommendations for an equitable transition to electric mobility in Vancouver. Recommendations from the cohort will be completed in August and incorporated into the City's EV Strategy.

Informed by community engagement and market research, the project team will develop a prioritization framework to guide where and how to promote the development of EV charging infrastructure to meet community needs. Staff will then work closely with internal departments to create a five-year implementation plan with priority locations for EV chargers, community-identified strategies to promote equity, clear department and partner roles, and FTE and funding requirements.

The final Citywide Electric Vehicle Infrastructure Strategy is expected to be complete in Fall 2025.

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Attachment(s):

- EV Strategy Presentation
- Transportation Electrification Strategies Overview 1-pager
- EV Strategy Community Survey 1-pager