



What We
Heard Report

Public Electric Vehicle Charging Strategy

November 2024



THIS IS
CLIMATE
ACTION

 City of
Burnaby



Land Acknowledgement

Burnaby is located on the ancestral and unceded homelands of the hə́ŋqəmiṇəm̓ and Skwxwú7mesh Sníchim speaking peoples. We are grateful for the opportunity to be on this territory.

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Background

Electric vehicle (EV) adoption is increasing in Burnaby based on public and individual efforts to reduce greenhouse gas emissions from transportation. Electric vehicles, whether battery electric or plug-in hybrid electric, require plug-in charging to recharge. While the preference is to charge the EV at home, not all residents can access or install the necessary charging infrastructure at home. Many residents may need to recharge their EV battery when travelling around the city. Therefore, public EV charging provides an important service to support EV adoption across the community.

The City of Burnaby has recognized that public charging will be important to meet its transportation and climate targets. [Connecting Burnaby: Burnaby Transportation Plan](#) outlines a target to reach zero emissions from transportation by 2050. The plan outlines a range of policies to reduce emissions by prioritizing sustainable transportation, enabling zero-emission vehicles and supporting charging infrastructure. In addition, the City's [Climate Action Framework](#) Move 5 supports the EV transition by providing public charging.

The City engaged consultants and subject matter experts to develop strategies to encourage public EV charging. We developed recommendations by understanding the current public charging context, assessing future needs, and integrating feedback from stakeholders and public engagement. The recommended strategies and implementation considerations will be presented in the Public EV Charging Strategy.

Public engagement activities

As part of the engagement activities, the City offered a public survey in summer 2024 on the City's Your Voice Engagement website. The objective of the survey was to consult community members on:

- » the current need and use of public charging
- » barriers to EV use, and
- » opportunities and preferences for future public charging sites

A total of 800 responses were submitted.



What We Heard

Key takeaways

Survey respondents indicated that public charging is an important part of the current charging landscape in Burnaby. Addressing public charging can encourage more people to use EVs. For current EV drivers, public charging is the primary charging location for roughly half of respondents who have EVs. Public charging is likely to remain in demand for future EV charging. A range of potential sites were identified as preferred, with City facilities receiving the highest number of rankings.

Current transportation choices

The most common transportation mode across respondents was driving a motor vehicle, followed by walking and transit.

Twenty percent of respondents use a car share at least once a year. Of all the car share users, only 17% had used a shared EV.

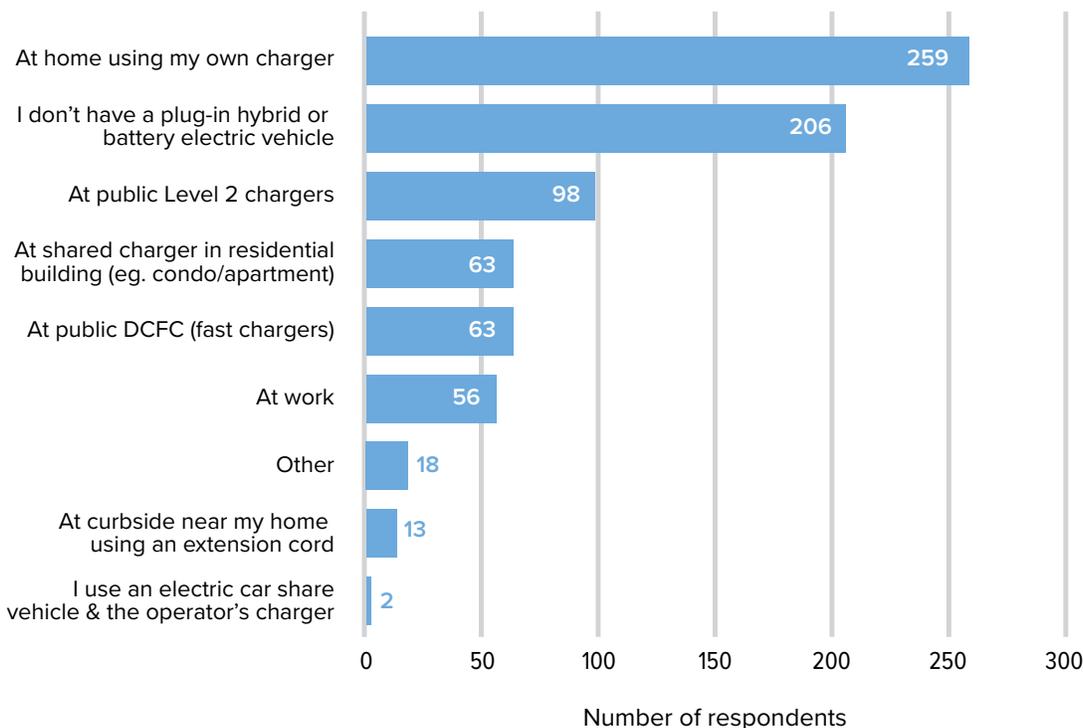
For respondents who had at least one vehicle in the household, the two most common vehicle types are battery electric vehicles (466 vehicles out of the 1109 vehicles reported) and gasoline or diesel vehicles (456 vehicles). The majority of respondents park their vehicle at home, either in a garage, parking lot, or parking garage, but 21% of respondents indicate that they park their vehicle on the street.

Current public charging

For current EV owners, public charging is an important resource. Nearly a third of respondents (28%) report using public charging as defined in this Strategy, relying on public direct current fast charging (DCFC), public Level 2 or workplace (likely Level 2) chargers, as shown in Figure 1. Another third of respondents (33%) reported that their primary charging location was at home with their own charger and 8% charge at home at a shared charger.

Figure 1. Public survey results for daily charging by current EV drivers

If your household has a plug-in hybrid or battery EV, where is the vehicle primarily charged for daily use?

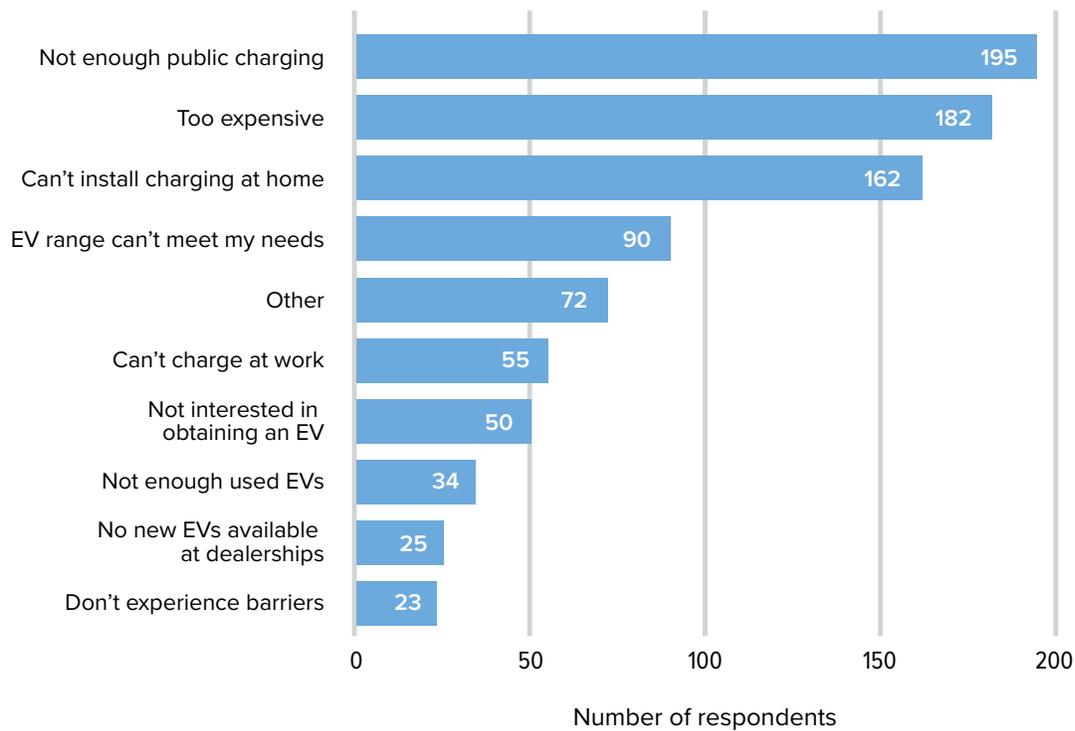


Considerations for future EV users and public charging

For prospective EV drivers, access to public charging is the leading barrier to obtaining an EV, as shown in Figure 2. This barrier becomes even more important considering not being able to install a charger at home is the third most common barrier, which could be addressed through access to home charging (such as EV-Ready retrofits) or through access to public charging.

Figure 2. Public survey responses to barriers to EV adoption use

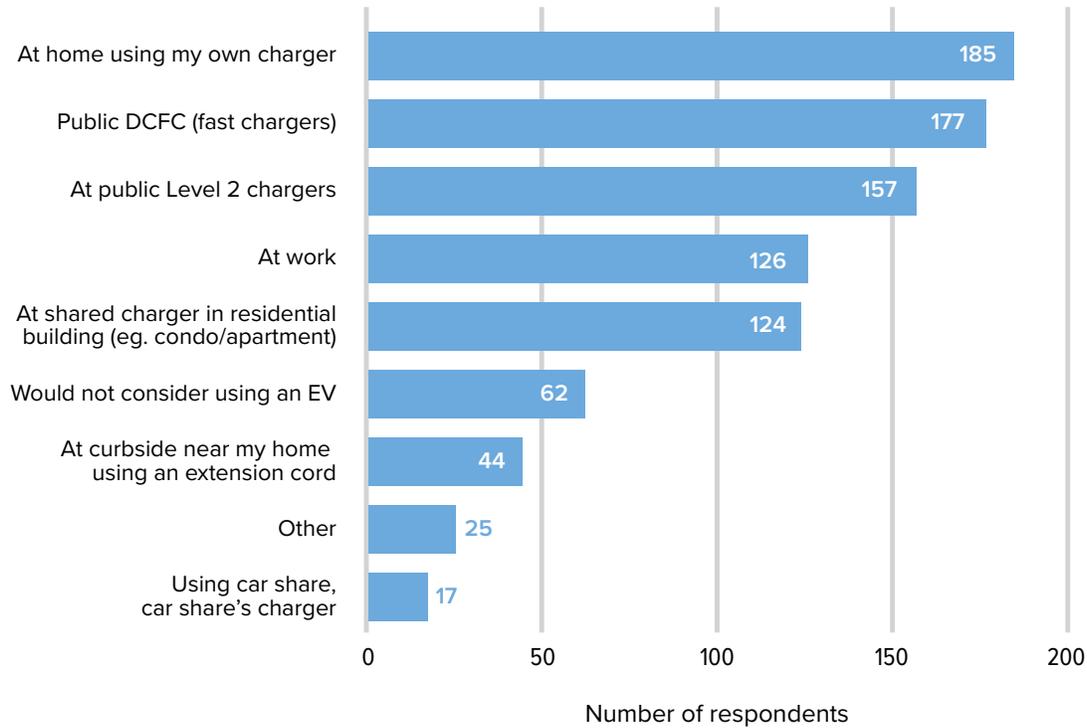
If your household does not have an EV, please select the top three barriers to obtaining an EV (ie. plug-in hybrid or battery electric vehicle)



For those prospective EV drivers, home charging is the preferred location that drivers would expect to charge for daily use, as shown in Figure 3.¹ However, public DCFC and Level 2 chargers are also commonly selected as top charging locations.

Figure 3. Public survey responses to daily charging preferences for future EV owners

If your household does not have an EV but you would consider obtaining one, please select the top three locations that you would expect to charge the vehicle for daily use

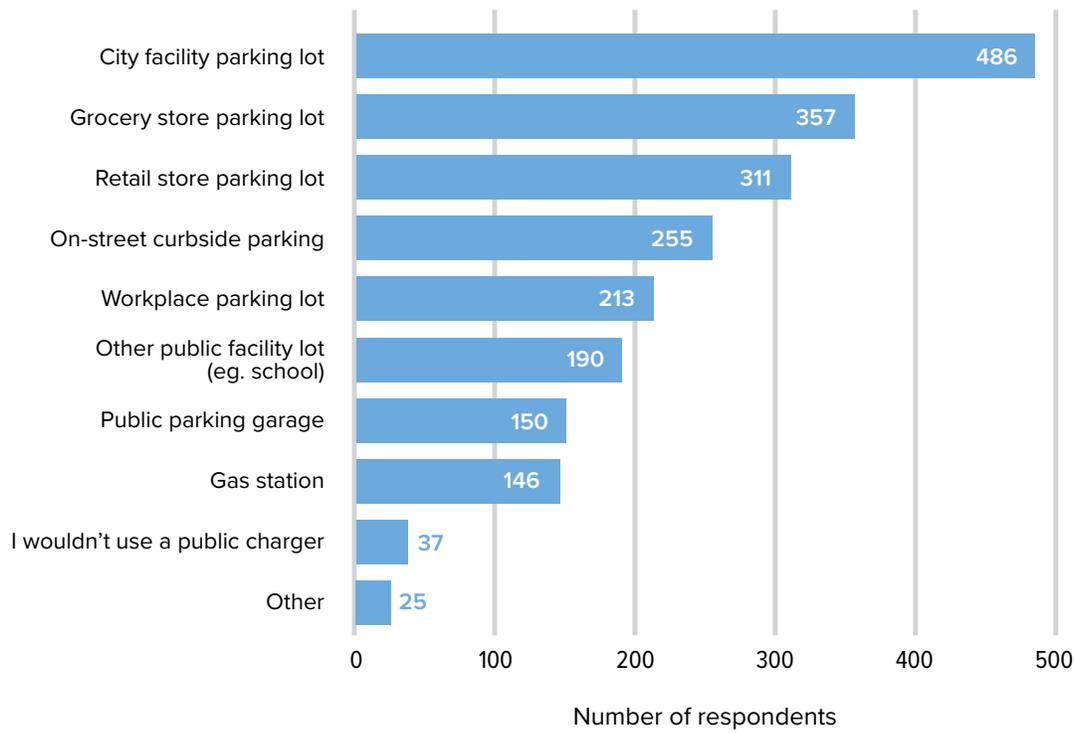


¹ To note, weighting is not incorporated into the results of the ranked questions and so each ranking (whether first, second or third) is recorded as equivalent.

For siting of public chargers, current and prospective EV drivers identified City facilities as a leading location, followed by grocery and retail parking lots, as shown in Figure 4. A range of other locations were indicated at similar rates, including locations where vehicles are parked for extended periods, such as curbside, at work, parking facilities and gas stations.

Figure 4. Public survey responses to preferred siting locations for public charging

If you currently use or would consider using public EV chargers, please select your top three preferred locations





Next Steps

Thank you to all community members who participated in the public survey. Your feedback has been invaluable in shaping the Strategy and its future implementation. The Public EV Charging Strategy will be reviewed by Council to decide on the next steps.

