

# ATTACHMENT B

## Nanaimo Region E-Mobility Survey 2024



Discovery Research is conducting the mail-in E-Mobility Survey on behalf of the City of Nanaimo. Your feedback will help inform the City's work and support for electric mobility.

*Your responses remain completely anonymous and confidential.*

**Please return your survey in the enclosed postage-paid envelope or complete online via QR code by June 26, 2024. Thank you for your help!**

### Current Transportation

1. Could you rank the top three most used modes of transportation in your daily life? The item ranked #1 should be the most commonly used mode. Please write the numbers next to the items.

- \_\_\_\_ Personal automobile (including cars, light trucks & vans)
- \_\_\_\_ Car share (e.g., MODO)
- \_\_\_\_ Transit
- \_\_\_\_ School bus
- \_\_\_\_ Walk (incl. jogging, wheelchair, mobility scooter)
- \_\_\_\_ Bicycle
- \_\_\_\_ Personal E-bike (pedal-assist electric bicycle)
- \_\_\_\_ E-bike share (Nanaimo's pilot EVOLVE bike share system)
- \_\_\_\_ Personal non-electric micromobility device (e.g., kick scooter, skateboard, inline skates, unicycle)
- \_\_\_\_ Personal electric micromobility device (e.g., e-kick scooter, e-skateboard, e-unicycle/mono-wheel)
- \_\_\_\_ Taxi or rideshare (e.g., AC Taxi, Yellow Cab, URide)
- \_\_\_\_ Motorcycle or scooter
- \_\_\_\_ Other – please specify: \_\_\_\_\_

### Electric Vehicle (EV) Use and Barriers

2. How many licensed (insured) motor vehicles (including cars, light trucks, vans and motorcycles) are available to the members of your household, including yourself? If there are no licensed motor vehicles, enter zero (0) and go to Q6.

Number: \_\_\_\_\_

3. How many of the motor vehicles listed above are the following types? (Please ensure that the numbers in this question add up to the number in question 2).

- # \_\_\_\_ Hybrid
- # \_\_\_\_ Plug-in hybrid
- # \_\_\_\_ Battery electric
- # \_\_\_\_ Gasoline or Diesel?
- # \_\_\_\_ There are no licensed motor vehicles available in my household
- Prefer not to answer
- Do not know

### Electric Vehicle (EV) Use and Barriers

4. If your household has a licensed motor vehicle, where is the vehicle typically parked?

- 1 In a private driveway or garage
- 2 In a shared or strata/condo parking lot
- 3 In a shared parking structure or parking garage
- 4 On the street
- 5 There are no licensed motor vehicles available in my household
- 6 Other – please specify: \_\_\_\_\_

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

- 1 At home using my own charger
- 2 At work
- 3 At public DCFC (fast) chargers
- 4 At public level 2 chargers
- 5 At a shared charger in a residential building (e.g., condo, apartment building)
- 6 I do not have a plug-in hybrid or battery electric vehicle
- 7 Other – please specify: \_\_\_\_\_

6. If your household does not have a plug-in hybrid or battery electric vehicle, could you rank the top three barriers to your household obtaining an electric vehicle (i.e., plug-in hybrid or battery electric vehicle)? The item ranked #1 should be the greatest barrier. Please write the numbers next to the items.

- \_\_\_\_ EVs are too expensive
- \_\_\_\_ There are no new EVs available at dealerships
- \_\_\_\_ There are not enough used EVs available
- \_\_\_\_ I do not think the driving range of an EV can meet my needs
- \_\_\_\_ There's not enough public charging
- \_\_\_\_ I cannot install charging at home
- \_\_\_\_ I do not experience any barriers
- \_\_\_\_ I am not interested in obtaining an electric vehicle
- \_\_\_\_ Other – please specify: \_\_\_\_\_

**PLEASE TURN OVER →**

## Electric Vehicle (EV) Use and Barriers

7. Could you rank the top three benefits you experience (if you own plug-in hybrid or battery electric vehicles), or you expect (if you obtain a plug-in hybrid or electric vehicle in the future). The item ranked #1 should be the greatest benefit. Please write the numbers next to the items.

- \_\_\_\_\_ Lower fuel costs
- \_\_\_\_\_ Lower repair and maintenance costs
- \_\_\_\_\_ Reduced environmental impact
- \_\_\_\_\_ Convenience of charging at home
- \_\_\_\_\_ I do not experience or expect any benefits
- \_\_\_\_\_ Other – please specify: \_\_\_\_\_

## E-micromobility Use and Barriers

**Electric micromobility (e-micromobility)** refers to small, lightweight transportation options that are powered in part or wholly by electricity. This survey is focused on the following two categories of e-micromobility:

- **Electric bikes (e-bikes)** are power-assisted cycles that have a motor to help propel the device and the motor only operates when you pedal. There are two classes of e-bikes in BC: (1) light e-bikes that are pedal-assist with a top motor-assisted speed of 25km/h and (2) standard e-bikes that are pedal-assist or throttle-assist and have a top motor-assisted speed of 32km/h.
- **E-micromobility devices** include e-scooters, e-skateboards, hoverboards and other lightweight low-speed electric-powered devices, including electric throttle-assisted bicycles that do not need to be pedalled to accelerate.

8. How many working children's and adult bicycles and electric bicycles (e-bikes) are available to members of your household, including yourself? How many electric micromobility devices such as e-scooters, e-skateboards, hoverboards? How many electric accessibility devices?

- # \_\_\_\_\_ Adult bicycles
- # \_\_\_\_\_ Adult E-bikes (light or standard e-bikes)
- # \_\_\_\_\_ Children's bicycles
- # \_\_\_\_\_ E-micromobility devices (e-scooters, e-skateboards, hoverboards)
- # \_\_\_\_\_ Electric accessibility devices (electric wheelchairs, mobility scooters)
- Not Applicable

9. If you have a bicycle or other non-electric micromobility device (kick scooter, skateboard, inline skates) in your household, could you rank the top three most common purposes for trips by this mode? The item ranked #1 should be the most common purpose. Please write the numbers next to the items.

- \_\_\_\_\_ Commuting to work
- \_\_\_\_\_ Commuting to school
- \_\_\_\_\_ Exercise
- \_\_\_\_\_ Shopping, appointments, or errands
- \_\_\_\_\_ Social or recreational activities (e.g. visiting friends)
- \_\_\_\_\_ Escorting a passenger (e.g., dropping a child off at school)
- \_\_\_\_\_ Other – please specify: \_\_\_\_\_
- Not Applicable, I do not use a bicycle or other non-electric e-micromobility device

## E-micromobility Use and Barriers

10. If you have an e-bike or other electric micromobility device in your household, where do you normally park your e-bikes or electric micromobility devices at home?

- 1 On the street
- 2 In a shared/common space (bike room, courtyard)
- 3 In a private outdoor space (balcony, patio, yard)
- 4 Inside my unit/house
- 5 Other – please specify: \_\_\_\_\_
- 6 Not applicable, I do not have an e-bike or electric micromobility device

11. If you have an e-bike or other electric micromobility device in your household, what are the top three most common purposes for trips by this mode? The item ranked #1 should be the most common. Please write the numbers next to the items.

- \_\_\_\_\_ Commuting to work
- \_\_\_\_\_ Commuting to school
- \_\_\_\_\_ Exercise
- \_\_\_\_\_ Shopping, appointments, or errands
- \_\_\_\_\_ Social, leisure or recreational activities (e.g., visiting friends, visiting a library)
- \_\_\_\_\_ Escorting a passenger (e.g., dropping a child off at school)
- \_\_\_\_\_ Other – please specify: \_\_\_\_\_
- Not Applicable, I do not use an e-bike or e-micromobility device

12. If you have an e-bike or electric micromobility device in your household, what is the typical trip length (in kilometers)?

- 1 Less than 1 km
- 2 1 to 3 km
- 3 4 to 6 km
- 4 7 to 10 km
- 5 11 to 15 km
- 6 16 to 20 km
- 7 21 km or more
- 8 Not applicable, I do not use an e-bike or e-micromobility device

13. If you have not already done so, have you considered travelling by electric bicycle or other electric micromobility devices?

- 1 Yes →Q14
- 2 No →Q15 [NEXT PAGE]
- 3 I already travel by electric bicycle or other electric micromobility Devices →Q15 [NEXT PAGE]

14. If you answered yes to Question 13, could you rank what you would expect to be your three most common purposes for trips by e-bike or other e-micromobility device? The item ranked #1 should be the most common. Please write the numbers next to the items.

- \_\_\_\_\_ Commuting to work
- \_\_\_\_\_ Commuting to school
- \_\_\_\_\_ Exercise
- \_\_\_\_\_ Shopping, appointments or errands
- \_\_\_\_\_ Social or recreational activities (e.g., visiting friends, visiting a library)
- \_\_\_\_\_ Escorting a passenger (e.g., dropping a child off at school)
- \_\_\_\_\_ Other – please specify: \_\_\_\_\_
- Not Applicable, I did not answer yes to Question 13

## E-micromobility Use and Barriers

15. If you do not have an e-bike or other micromobility device in your household, could you rank the top three barriers to your household obtaining an e-bike or other electric micromobility device? The item ranked #1 should be the greatest barrier. Please write the numbers next to the items.

- E-bikes and e-micromobility devices are too expensive
- I do not feel safe travelling by active transportation modes
- I am not familiar with how to operate an e-bike or e-micromobility device
- I am concerned that an e-bike or e-micromobility device is too heavy or physically challenging to operate
- There is limited access to safe active transportation routes or lanes (e.g., bike paths, shared use paths)
- Parking at home is not sufficiently secure
- Parking at home is not the right size or not easy to use
- Parking when away from home is not sufficiently secure
- Parking when away from home is not the right size or easy to use
- I am concerned that an e-bike or e-micromobility device is likely to be stolen
- There is limited access to charging away from home (e.g., e-bike charging)
- I am concerned about travelling in poor weather
- I do not experience any barriers
- Other – please specify: \_\_\_\_\_

16. Could you rank the top three benefits you experience (if you use an e-bike or e-micromobility device) or you expect (if you would use an e-bike or e-micromobility device in the future). The item ranked #1 should be the greatest benefit. Please write the numbers next to the items.

- Able to travel further with an active mode
- Able to travel on more difficult terrain (e.g., hills) with an active mode
- Able to travel faster with an active mode
- Able to travel without getting sweaty with an active mode
- Able to have passengers (e.g., travel with a child)
- Lower transportation costs
- Easier parking
- Exercise and physical health benefits
- General enjoyment or other mental health benefits
- I do not experience or expect benefits
- Other – please specify: \_\_\_\_\_

## E-mobility solutions

17. What, if anything, would make travel with an electric vehicle (i.e., plug-in-hybrid or battery electric vehicle) more appealing than it is today?

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## E-mobility solutions

18. What, if anything, would make travel with an e-bike or other electric micromobility devices more appealing than it is today?

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19. What, if any, would you like the City of Nanaimo to do to support travel by electric vehicles, e-bikes and other electric micromobility devices?

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## About You

20. What age range do you belong to?

- 1 16 to 18 years old
- 2 19 to 24 years old
- 3 25 to 34 years old
- 4 35 to 44 years old
- 5 45 to 54 years old
- 6 55 to 64 years old
- 7 65+ years old

21. What best describes your gender identity?

- 1 Male
- 2 Female
- 3 Non-binary
- 4 Prefer to self describe: \_\_\_\_\_

22. Do you live inside the City of Nanaimo?

- 1 Yes → Q24 [NEXT PAGE]
- 2 No ↘

23. How often are you in the City of Nanaimo? Select all that apply.

- 1 I work in the City
- 2 I am in the City **daily** for school, leisure, errands or other activities
- 3 I am in the City **at least once a week** for school, leisure, errands or other activities
- 4 I am in the City **at least once a month** for school, leisure, errands or other activities
- 5 I do not visit the City often
- 6 Prefer Not to Say

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## About You

24. Where is your home located? Please provide your postal code:

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

25. What is the type of home you live in?

- 1 Single detached house
- 2 Semi-detached house (two dwellings attached side by side)
- 3 Movable dwelling (e.g., mobile or manufactured home)
- 4 Other single-attached house
- 5 Row house (three or more dwellings joined side by side)
- 6 Apartment, duplex (dwellings located one above the other)
- 7 Apartment, building that has fewer than five storeys
- 8 Apartment, building that has more than five storeys
- 9 Other, please specify: \_\_\_\_\_

26. Is your place of residence rented or owned by you or by another person in your household?

- 1 Rented
- 2 Owned
- 3 Other, please specify: \_\_\_\_\_

27. Are there one or more children under the age of 18 in the home?

- 1 Yes
- 2 No

28. What is your current employment status?

- 1 Employed full-time (30 hours or more per week)
- 2 Employed part-time (less than 30 hours per week)
- 3 Stay at home parent
- 4 Retired
- 5 In school or training
- 6 Unemployed and looking for work
- 7 Unemployed and not looking for work (unpaid volunteer, disability leave, maternity leave)
- 8 Other, please specify: \_\_\_\_\_

29. Please indicate the range which corresponds to your household's total gross income last year (from all sources, before income taxes).

- 1 Under \$25,000
- 2 \$25,000 - \$49,000
- 3 \$50,000 - \$79,000
- 4 \$80,000 - \$124,999
- 5 \$125,000 - \$199,000
- 6 \$200,000 and over
- 7 Do not know
- 8 Prefer not to answer

## About You

30. Which best describes your background? Select all that apply

- 1 White
- 2 First Nations, Metis or Inuk (Inuit)
- 3 South Asian (e.g., East Indian, Pakistani, Sri Lankan)
- 4 Chinese
- 5 Black
- 6 Filipino
- 7 Arab
- 8 Latin American
- 9 Southeast Asian (e.g., Vietnamese Cambodian, Laotian, Thai)
- 10 West Asian (e.g., Iranian, Afghan)
- 11 Korean
- 12 Japanese
- 13 Other – please specify: \_\_\_\_\_
- 14 Prefer not to answer

31. Do you consider yourself to be a person with a disability?

- 1 Yes, visible disability
- 2 Yes, non-visible or invisible disability
- 3 No
- 4 Prefer not to answer

**WE THANK YOU FOR TAKING THE TIME  
TO COMPLETE THIS SURVEY!**

### Contest Entry

**Completed** surveys will be eligible for one of 2 prizes:

**(2) \$150 Gift Card to Grocery Store of Choice**

Name\*: \_\_\_\_\_ Phone\*: \_\_\_\_\_

**Good Luck!**

*\*Contact information will only be used to contact you if you win a prize.  
Survey responses will remain anonymous.*