

General Perceptions of Micromobility in Abbotsford

Informed Consent

We're conducting a survey about micromobility options in Abbotsford on behalf of Thompson Rivers University for an undergraduate research project investigating the potential for micromobility adoption in the province of BC.

If you agree to take part in this study, you will be asked to complete the questionnaire starting on the next page. You should be able to complete it in approximately 10-12 minutes.

Participants will be asked to complete a survey that includes questions about their knowledge, interest, and usage of micromobility options. The information collected will be used for academic research purposes, including presentations, publications, and reports.

There are minimal risks associated with participating in this study. Some participants may feel uncomfortable answering certain questions, but you are free to skip any questions you do not wish to answer. The potential benefits of this study include contributing to the development of sustainable transportation policies in BC and enhancing the understanding of micromobility options.

Your participation is voluntary, and you may stop at any time. Please note that there are no right or wrong answers. Please respond to the best of your ability. If there are any questions you prefer not to answer, you may decline to answer those questions. All information collected in this survey will be kept confidential, stored on a password protected computer kept by the principal investigator. Survey data will be retained on this computer for 1 year, then the data will be deleted.

If you would like to withdraw your data from this study, please enter an identifier for yourself in question 2. To withdraw, please email your request to the principal investigator and note the identifier you used. As all personal data will be kept confidential, you may use any identifier you will remember.

If you have questions during or after completion of this study, or if you would like to receive copies of the results, you may contact the principal investigator, Rufaro Mundangepfupfu from Thompson Rivers University at munandgefupfur20@mytru.ca. If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact the Chair of the Research Ethics Board at Thompson Rivers University at TRU-REB@tru.ca or 250-828-

5000, or you may contact the Dean of the School of Business and Economics, Dr. Michael Henry, at mihenry@tru.ca or 250-852-6290.

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1. If you are 16 years of age or older, understand the statements above, and consent to participate in the study, click the “I agree” button to begin the survey. By clicking “I agree” and filling out this survey, you are consenting to participate.

- ☐ Agree
- ☐ Disagree

2. Optional: Please provide an identifier(s) for your survey entry. This will be kept confidential and only used should you wish to withdraw your responses.

Withdrawal identifier (e.g. initials (i.e. something you will remember)):

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Screening Questions

3. Do you live in Abbotsford?

☐ Yes

☐ No

4. What is your age?

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Micromobility knowledge and perceptions

This survey aims to understand your transportation habits, knowledge, and perceptions of various micromobility devices. Micromobility refers to small, lightweight, and low-speed human and electric-powered vehicles, such as electric bicycles and electric scooters. Your insights will help shape future transportation options in our community.

Micromobility Options

1



2



3



4



5



6



7



10



9



8



11



1. Single axis electric mobility device - unicycle
2. Single axis electric mobility device - hoverboard
3. Skateboard
4. Kick scooter (with no electric assist)
5. Single axis electric mobility device - Segway
6. Motorcycle (cruiser, sport or classic)
7. E-skateboard (with electric assist)
8. Seated limited speed electric scooter or moped
9. Conventional bicycle (with no electric assist)
10. E-bike (with electric assist)
11. Kick e-scooter (with electric assist)

5. How often do you currently use the following? And How often would you ideally like to use them?

	Current use	Ideal use
E-bike (with electric assist)	<input type="text"/>	<input type="text"/>
Conventional bicycle (with no electric assist)	<input type="text"/>	<input type="text"/>
Kick e-scooter (with electric assist)	<input type="text"/>	<input type="text"/>
Kick scooter (with no electric assist)	<input type="text"/>	<input type="text"/>
Seated limited speed electric scooter or moped	<input type="text"/>	<input type="text"/>
Motorcycle (cruiser, sport or classic)	<input type="text"/>	<input type="text"/>
E-skateboard (with electric assist)	<input type="text"/>	<input type="text"/>
Skateboard	<input type="text"/>	<input type="text"/>
Single axis electric mobility device (unicycle, hoverboard, Segway)	<input type="text"/>	<input type="text"/>
Private motor vehicle (e.g., car, truck, van, SUV)	<input type="text"/>	<input type="text"/>
Public transit pass (e.g., Umo, UPASS)	<input type="text"/>	<input type="text"/>
Ride hailing app (e.g., URide) that you use frequently	<input type="text"/>	<input type="text"/>

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Micromobility knowledge and perceptions

6. What mode(s) do you use most often to get to and from public transit?

- ☐ Walking
- ☐ Private motor vehicle - someone drives me and drops me off at the stop or station
- ☐ Private motor vehicle - I drive and park at or near the stop or station ☐
- ☐ Motorcycle (cruiser, sport or classic)
- ☐ Seated limited speed electric scooter or moped
- ☐ Kick e-scooter (with electric assist)
- ☐ Kick scooter (scooter with no electric assist)
- ☐ E-bike (bicycle with electric assist)
- ☐ Conventional bicycle (bicycle with no electric assist)
- ☐ Ride hailing (e.g., Uber) or Taxi
- ☐ I do not use public transit: Private vehicle or Other (please specify)

- ☐ None of the above (SKIP)

7. How strongly do you agree or disagree with the following statements about e-bikes? I think e-bikes ...

	Strongly disagree	Somewhat disagree	Neutral/I don't know	Somewhat agree	Strongly Agree	No response
Are safe to ride	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are fun to ride	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can be used by people of all ages & abilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are good for short trips (e.g., help people get around faster or more easily)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can make it easier for people to connect to public transit (i.e., could help with the "first and last mile" of transit trips)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Can reduce reliance on cars and therefore could reduce local/regional traffic congestion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Should only be allowed to be used by those with a driver's license	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. Do you think e-mobility devices are a good alternative to the following transportation modes?

	Yes	No	I don't know	No response
Driving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Walking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking short public transit trips (15 min or less)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taking long public transit trips (more than 15 min)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Choose the top factors that make you WANT to ride an e-mobility device for transportation, if any.

- ☐ Desire to be innovative or try something new
- ☐ Ease of travel and convenience compared to device with no assist (e.g., easier to climb hills, go further distances)
- ☐ Reduced transportation costs
- ☐ Environmental benefits
- ☐ Safe and direct routes
- ☐ Secure, covered parking
- ☐ Physical activity
- ☐ Improved mental health
- ☐ Encouragement/inspiration from friends or family to ride
- ☐ I don't know
- ☐ Other (please specify)

- ☐ None of the above

10. Choose the top factors that make you NOT WANT to ride an e-mobility device for transportation, if any

- ☐ Lack of familiarity with these devices and technology
- ☐ No interest in using these devices
- ☐ Cost
- ☐ Not enough cargo space
- ☐ Reduced exercise compared to using other active modes (e.g. walking, bike)
- ☐ Stigma of using an e-assist device
- ☐ Lack of safe and direct bike routes
- ☐ Concerns for weather and/or distances (being too far)
- ☐ Mobility or health issues
- ☐ Fear of theft
- ☐ Other (please specify)

11. Do you think e-scooters should be permitted to ride in the following places?

	Yes	No	I don't know	No response
Sidewalks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bike lanes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Off-street walking and cycling corridors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pathways in parks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quiet residential streets (i.e., roads with no marked lanes or centrelines)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Busy multi-lane streets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify) - I think e-scooters should be allowed to ride on...

12. Do you think e-scooters should be permitted to park anywhere or in designated area only?

- ☐ Anywhere
- ☐ Only in designated stations or areas
- ☐ I don't know
- ☐ No response

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Q1	Q2
Q3	Q4
Q5	Q6
Q7	Q8
Q9	Q10
Q11	Q12
Q13	Q14
Q15	Q16
Q17	Q18
Q19	Q20
Q21	Q22
Q23	Q24
Q25	Q26
Q27	Q28
Q29	Q30
Q31	Q32
Q33	Q34
Q35	Q36
Q37	Q38
Q39	Q40
Q41	Q42
Q43	Q44
Q45	Q46
Q47	Q48
Q49	Q50
Q51	Q52
Q53	Q54
Q55	Q56
Q57	Q58
Q59	Q60
Q61	Q62
Q63	Q64
Q65	Q66
Q67	Q68
Q69	Q70
Q71	Q72
Q73	Q74
Q75	Q76
Q77	Q78
Q79	Q80
Q81	Q82
Q83	Q84
Q85	Q86
Q87	Q88
Q89	Q90
Q91	Q92
Q93	Q94
Q95	Q96
Q97	Q98
Q99	Q100

13. How strongly do you agree or disagree with the following statements? "I think a shared e-scooter program in my region ...

[illegible]

14. If a shared e-scooter program was made available in your area, how often do you think you would typically use it?

- ☐ Never—not once
- ☐ Very Infrequently—once or twice in the next few years
- ☐ Annually—at least once a year but not monthly
- ☐ Monthly—at least once a month but less than once a week
- ☐ Weekly—at least once a week but not daily
- ☐ I don't know
- ☐ No response

15. If a shared e-scooter program was made available in your area, how likely or unlikely are you to use it in the following ways:

[illegible]

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16. What types of traffic control devices do you think are most beneficial for promoting micromobility and active transportation in Abbotsford? (Select all that apply)

- ☐ Dedicated e-scooter paths
- ☐ Shared-use paths
- ☐ Advanced stop lines for bicycles
- ☐ Bicycle traffic signals
- ☐ Raised crosswalks and intersections
- ☐ Curb extensions (bulb-outs)
- ☐ High-visibility crosswalks
- ☐ Improved signage and wayfinding
- ☐ Street furniture and amenities (e.g., benches, water fountains)
- ☐ Other (please specify)

- ☐ None of the above (SKIP)

17. What information would help you feel more confident using micromobility options? (Select all that apply)

- ☐ Safety guidelines and best practices for riding e-bikes and e-scooters
- ☐ Information on the benefits of micromobility for health and the environment
- ☐ Maps and routes for micromobility-friendly paths
- ☐ Details about pricing and payment options for micromobility services
- ☐ Updates on new infrastructure projects and improvements
- ☐ Other (please specify)

- ☐ None of the above (SKIP)

18. What benefits do you see in integrating micromobility with public transit? (Select all that apply)

- ☐ Increased convenience
- ☐ Reduced travel time
- ☐ Cost savings
- ☐ Environmental benefits
- ☐ Improved access to public transit
- ☐ Reduced traffic congestion
- ☐ Other (please specify)

- ☐ None of the above (SKIP)

19. What concerns do you have about integrating micromobility with public transit? (Select all that apply)

- ☐ Safety
- ☐ Increased congestion at transit stops
- ☐ Maintenance and reliability of micromobility vehicles
- ☐ Potential for theft or vandalism
- ☐ Cost of integration
- ☐ Other (please specify)

- ☐ None of the above (SKIP)

20. Do you have any additional comments or suggestions regarding micromobility adoption in Abbotsford?

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Demographic Information

The following questions ask about your individual characteristics and will be used for comparison purposes only. All information will remain strictly anonymous.

21. What is your gender?

- ☐ Man
- ☐ Woman
- ☐ Transgender Man
- ☐ Transgender Woman
- ☐ Non-binary/Genderqueer
- ☐ I'm not sure/ I don't know
- ☐ I prefer not to say
- ☐ Different identity (please specify if desired)

22. What is your employment status?

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ Self-employed
- ☐ Unemployed
- ☐ Student
- ☐ Retired
- ☐ Other (please specify)

23. What is the highest level of education you have completed? [Select one]

- ☐ Some high school or less
- ☐ Graduated high school
- ☐ College/vocational/technical
- ☐ Some university
- ☐ Graduated university
- ☐ Graduate degree (e.g., masters)
- ☐ I don't know/not sure
- ☐ I prefer to not respond
- ☐ Other (please specify)

24. What are the first 3 digits of your home postal code?

[Please enter in the format - ??? (e.g., V2T)]

[Enter UNK is unknown]

25. What are the first 3 digits of your primary work, school or volunteer location's postal code?

[Please enter in the format - ??? (e.g., V2T)]

[Enter UNK is unknown]

26. Are there children (16 years old or younger) in your household?

- ☐ Yes
- ☐ No
- ☐ I prefer to not respond

27. How would you describe your ethnic background? [select all that apply]

- ☐ White
- ☐ Indigenous (First Nations, Metis, Inuk/Inuit)
- ☐ South Asian
- ☐ Black
- ☐ Latino
- ☐ East/Southeast Asian
- ☐ Middle Eastern
- ☐ I don't know/not sure
- ☐ I prefer to not respond
- ☐ Other (please specify)

28. In general, for someone your age, would you say that your health is? [Select one]

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ I don't know/not sure
- ☐ I prefer to not respond

29. Do you engage in at-home sustainability practices? [select all that apply]

- ☐ Recycling household waste
- ☐ Composting organic waste
- ☐ Using energy-efficient appliances
- ☐ Using water-saving fixtures (e.g., low-flow showerheads, dual-flush toilets)
- ☐ Using reusable shopping bags
- ☐ Reducing single-use plastics (e.g., using reusable containers and utensils)
- ☐ Growing your own food (e.g., vegetable garden, herb garden)
- ☐ Using a programmable thermostat to reduce energy consumption
- ☐ Purchasing locally sourced food and products
- ☐ Using public transportation, carpooling, or biking instead of driving
- ☐ Other (please specify)

30. Do you have any health, physical, or sensory issues that limit your ability to walk or bike?

- ☐ Yes
- ☐ No
- ☐ I don't know/not sure
- ☐ I prefer to not respond

31. Which best describes your total annual household income before taxes? [Select one]

- ☐ Under \$20,000 per year
- ☐ Between \$20,000 and \$34,999 per year
- ☐ Between \$35,000 and \$49,999 per year
- ☐ Between \$50,000 and \$74,999 per year
- ☐ Between \$75,000 and \$99,999 per year
- ☐ Between \$100,000 and \$149,999 per year
- ☐ Between \$150,000 and \$199,999 per year
- ☐ Over \$200,000 per year
- ☐ I don't know/not sure
- ☐ I prefer to not respond