

## Survey Introduction

The University of Leeds, University of Utrecht and Lund University are conducting research on the role of shared micromobility, such as shared bikes, shared e-bikes, shared e-scooters, and shared mopeds, in daily transport and urban life.

We would like to hear from you about your opinions of shared micromobility services and whether or not you use these services. The questionnaire will provide us with valuable information on how existing shared micromobility services have influenced your daily travel and quality of life, which will be helpful for making our transport system more efficient, inclusive, safe, and sustainable.

This questionnaire would take you approximately 20 minutes to complete. Please leave your name and email at the end of the questionnaire if you wish to participate the prize draw so that we could reach you once you win the prize.

Taking part in this survey is entirely voluntary. You are free to stop participation at any time. All information will be handled securely in accordance with General Data Protection Regulation (GDPR) and used for only research purposes.

If you have any questions about this questionnaire, please free to contact us by emailing: [Z.An@leeds.ac.uk](mailto:Z.An@leeds.ac.uk). In addition, you can contact [x.guan@uu.nl](mailto:x.guan@uu.nl) in the Netherlands and [rosalia.camporeale@tft.lth.se](mailto:rosalia.camporeale@tft.lth.se) in Sweden.

Thank you in advance for participating. We really appreciate your input!

## Part 1: About yourself

First, we wish to ask you a few questions about yourself.

1.1 In what year were you born?

....

1.2 What is your gender?

1. Male
2. Female
3. Non-binary
4. Other, please specify
5. Prefer not to say

1.3 How many people live in your household?

....

1.4 Which of the below best describes your (main) household?

1. Living by yourself
2. Sharing with a partner/spouse
3. Sharing with a partner/spouse and children
4. Sharing with children and no partner/spouse
5. Living with parent(s)/grandparent(s)
6. Sharing with parent(s) and partner/spouse
7. Sharing with parent(s), partner/spouse and children
8. Sharing with others (e.g., house share)
9. Other, please specify

1.5 Which of the below best describes your situation?

1. Employed
2. Self-employed/Freelance
3. Interning
4. Part-time
5. Unemployed- Looking for work
6. Unemployed – Not looking for work
7. Homemaker
8. Studying
9. Military/Forces
10. Retired
11. Unable to work
12. Other, please specify

## Part 2: Familiarity of Shared micromobility

This section focuses on shared micromobility.

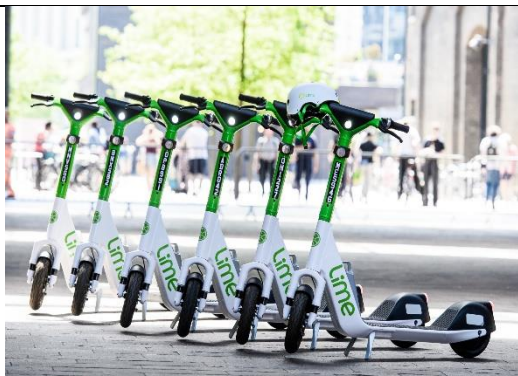
Micromobility generally refers to a range of small, lightweight vehicles operating at speeds typically below 25 km/h (15 mph) and driven by users. Micromobility vehicles include bikes, electric bikes (e-bikes), electric scooters and electric mopeds. Shared micromobility is the use of these forms of transport which are not privately owned.



Shared Bikes



Shared E-bikes



Shared E-scooters



Shared E-mopeds



Shared e-bakfiets/(e-)cargo bikes

2.1 How often do you use the following shared micromobility services in Malmö?

Randomised order	Daily	4-6 days a week	1-3 days a week	1-3 days a month	6-11 days a year	1-5 days a year	(Almost) Never
Shared bikes							
Shared e-bikes							
Shared e-scooters							
Shared e-mopeds							
Shared bakfiets/(e-)cargo bikes							

Questions 2.1 determines routing questions in Part 3.

2.2 Which forms of shared micromobility have you used at any other location in Sweden?

Select all that apply

1. Bikes
2. E-bikes
3. E-scooters
4. E-Moped
5. E-bakfiets/(E-)cargo bikes
6. Other, please specify
7. None of the above

2.3 How often do you use the following forms of transport?

Randomised order	Daily	4-6 days a week	1-3 days a week	1-3 days a month	6-11 days a year	1-5 days a year	(Almost) Never
Car							
Train and regional public transport							
Local public transport (bus, tram, and metro)							
Walking							
Bike (self- or family-owned)							
E-bike (self- or family-owned)							
Taxi and other ride-hailing services (e.g., Uber)							

2.4 What forms of transport do you use most frequently for different reasons to travel and what are your preferred forms?

1. Car; 2. Train and regional public transport; 3. Local public transport (bus, tram, and metro); 4. Walking; 6. Bike & E-bike (self- or family owned); 7. Taxi 8. Motorcycle

	Most frequently used mode	Most preferred mode
Commuting trips		
Shopping trips		
Recreational trips		

## Routing based on Questions 2.1.

### Part 3.a.: Modal shift and the use of shared micromobility

The following questions focus on how the use of shared micromobility has impacted how you travel.

#### Shared bike users: Questions 3.1-3.2.

3.1 To what extent has the use of shared bikes changed the use of other forms of transport?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased	Hardly ever use this form
Car						
Train and regional public transport						
Local public transport (bus, tram, and metro)						
Walking						
Bikes (self- or family-owned)						
E-bikes (self- or family-owned)						
Taxi						

3.2 Has the use of shared bikes impacted your travel in other ways?

	Much decreased	Decreased	About the same	Increased	Much increased
The convenience to access daily travel destinations					
The number of shopping trips					
The number of recreational trips					
The number of trips to visit friends and family members					
Monthly travel expense					
Satisfaction with daily travel					

#### Shared e-bike users: Questions 3.3-3.4.

3.3 To what extent has the use of shared e-bikes changed the use of other forms of transport?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased	Hardly ever use this form
Car						
Train and regional public transport						
Local public transport (bus, tram, and metro)						
Walking						
Bikes (self- or family-owned)						

E-bikes (self- or family-owned)						
Taxi						

3.4 Has the use of shared e-bikes impacted your travel in other ways?

	Much decreased	Decreased	About the same	Increased	Much increased
The convenience to access daily travel destinations					
The number of shopping trips					
The number of recreational trips					
The number of trips to visit friends and family members					
Monthly travel expense					
Satisfaction with daily travel					

### Shared e-scooter users: Questions 3.5-3.6.

3.5 To what extent has the use of shared e-scooters changed the use of other forms of transport?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased	Hardly ever use this form
Car						
Train and regional public transport						
Local public transport (bus, tram, and metro)						
Walking						
Bikes (self- or family-owned)						
E-bikes (self- or family-owned)						
Taxi						

3.6 Has the use of shared e-scooters impacted your travel in other ways?

	Much decreased	Decreased	About the same	Increased	Much increased
The convenience to access daily travel destinations					
The number of shopping trips					
The number of recreational trips					
The number of trips to visit friends and family members					
Monthly travel expense					
Satisfaction with daily travel					

### Shared e-mopeds users: Questions 3.7-3.8.

3.7 To what extent has the use of shared e-mopeds changed the use of other forms of transport?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased	Hardly ever use this form
Car						
Train and regional public transport						
Local public transport (bus, tram, and metro)						
Walking						
Bikes (self- or family-owned)						
E-bikes (self- or family-owned)						
Taxi						

3.8 Has the use of shared e-mopeds impacted your travel in other ways?

	Much decreased	Decreased	About the same	Increased	Much increased
The convenience to access daily travel destinations					
The number of shopping trips					
The number of recreational trips					
The number of trips to visit friends and family members					
Monthly travel expense					
Satisfaction with daily travel					

3.9 For what purpose(s) do you use (any of) shared micromobilities?

*Select all that apply*

1. Commuting
2. Recreation
3. Shopping
4. To visit friends or family members
5. Exercise
6. To access other transport forms (e.g., bus stations and parking lots)
7. Others

## Part 3.b: Modal shift and the use of shared micromobility

The following questions focus on the potential future use of shared micromobility.

### Shared bike non-users: Questions 3.10-3.11.

3.10 Are you aware of the presence of shared bike systems in Malmö?



**Shared Bikes**

1. Yes - if yes, please specify
2. No

3.11 Thinking about your trips in the past week. If you could have used shared bikes more or less according to your preference, how would the use of other forms of transport be impacted?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased
Car					
Train and regional public transport					
Local public transport (bus, tram, and metro)					
Walking					
Bikes (self- or family-owned)					
E-bikes (self- or family-owned)					
Taxi					

### Shared e-bike non-users: Questions 3.12-3.13.

3.12 Are you aware of the presence of shared e-bike systems in Malmö?



**Shared E-bikes**

1. Yes - if yes, please specify
2. No



3.13 Thinking about your trips in the past week. If you could have used shared e-bikes more or less according to your preference, how would the use of other forms of transport be impacted?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased
Car					
Train and regional public transport					
Local public transport (bus, tram, and metro)					
Walking					
Bikes (self- or family-owned)					
E-bikes (self- or family-owned)					
Taxi					

### Shared e-scooter non-users: Questions 3.14-3.15.

3.14 Are you aware of the presence of shared e-scooter systems in Malmö?



**Shared E-scooters**

1. Yes - if yes, please specify
2. No

3.15 Thinking about your trips in the past week. If you could have used shared e-scooters more or less according to your preference, how would the use of other forms of transport be impacted?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased
Car					
Train and regional public transport					
Local public transport (bus, tram, and metro)					
Walking					
Bikes (self- or family-owned)					
E-bikes (self- or family-owned)					
Taxi					

### Shared e-moped non-users: Questions 3.16-3.17.

3.16 Are you aware of the presence of shared e-moped systems in Malmö?



## Shared E-mopeds

1. Yes - if yes, please specify
2. No

3.17 Thinking about your trips in the past week. If you could have used shared e-mopeds more or less according to your preference, how would the use of other forms of transport be impacted?

Randomised order	Much decreased	Decreased	About the same	Increased	Much increased
Car					
Train and regional public transport					
Local public transport (bus, tram, and metro)					
Walking					
Bikes (self- or family-owned)					
E-bikes (self- or family-owned)					
Taxi					

3.18 Which of the following reasons prevent you from using the above shared micromobilities?

*Select all that apply*

1. I am not aware of shared micro-mobility services in our city
2. There are no shared micro-mobility services near my home
3. I cannot always find proper parking space when using shared micromobilities
4. I found it difficult to use shared micro-mobilities due to my physical condition & abilities
5. I found it difficult to use shared micro-mobilities due to the long distance of daily trips
6. I found it difficult to use the smartphone apps on shared micromobilities
7. I am concerned about privacy safety when using shared micromobility apps
8. The price of shared micro-mobility services is too high
9. I spend much more time travelling than I'd like when using shared micromobilities
10. I am concerned about traffic safety when using shared micromobilities
11. I preferred other transportation modes much more than shared micromobilities
12. Other reasons (please specify) ...

**Questions below are for all respondents (not routing)**

3.19 This is a control question to test that you are not answering randomly and paying attention. Please select "agree".

1. Totally disagree
2. Disagree

3. Neither disagree nor agree
4. Agree
5. Totally agree

3.20 On a scale of 1-7 (1 being very low and 7 being very high), how interested are you in using the following forms of transport in the future on at least one day a week:

shared bikes	1	2	3	4	5	6	7
shared e-bikes	1	2	3	4	5	6	7
shared e-scooters	1	2	3	4	5	6	7
shared e-mopeds	1	2	3	4	5	6	7

3.21 On a scale of 1-7 (1 being very low and 7 being very high), how much do you intend using the following forms of transport in the future on at least one day a week:

shared bikes	1	2	3	4	5	6	7
shared e-bikes	1	2	3	4	5	6	7
shared e-scooters	1	2	3	4	5	6	7
shared e-mopeds	1	2	3	4	5	6	7

## Part 4 Personal views

This section focuses on your opinions of using shared micromobility and people who use shared micromobility. Please follow your first reaction and do not overthink when answering the questions.

4.1 Please indicate your overall impression of the following forms of transport

Randomised order	Very negative	Negative	Neutral	Positive	Very positive
Shared bikes					
Shared e-bikes					
Shared e-scooters					
Bikes (self- or family-owned)					
E-bikes (self- or family-owned)					
E-scooters (self- or family-owned)					

4.2 Please indicate to what extent do you agree with the statements listed below about shared e-scooter users, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.



**Shared E-scooters**

(Randomized order)

1. They are trustworthy road users.
2. They are friendly road users
3. They care about others' feelings on the road.
4. They do not take risks on the road.
5. They value road safety.
6. They obey traffic regulations.
7. They only use shared e-scooters where they are allowed.
8. They park shared e-scooters properly.

4.3 Please indicate to what extent do you agree with the statements listed below about shared e-scooter systems, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.

1. Overall, using shared e-scooters should be encouraged.
2. Shared e-scooter systems should be expanded.
3. Supporting policies/traffic regulations should be implemented to promote the use of shared e-scooters.
4. These systems have the potential to make people's daily travelling more pleasurable.
5. These systems have the potential to make people's daily travelling more comfortable.
6. These systems have the potential to make people's daily travelling more flexible.

7. These systems have the potential to allow better access to daily travel destinations.
8. These systems have the potential to reduce traffic congestion.
9. These systems have the potential to reduce traffic emissions.
10. These systems have the potential to make the overall transport system more efficient.
11. These systems have the potential to reduce the cost of daily travelling.

4.4 Please indicate to what extent do you agree with the statements listed below about shared bike/e-bike users, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.

(Randomized order)

1. They are trustworthy road users.
2. They are friendly road users
3. They care about others' feelings on the road.
4. They do not take risks on the road.
5. They value road safety.
6. They obey traffic regulations.
7. They only use shared bikes/e-bikes where they are allowed.
8. They park shared bikes/e-bikes properly.

4.5 Please indicate to what extent do you agree with the statements listed below about shared bike/e-bike systems, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.

1. Overall, using shared bikes/e-bikes should be encouraged.
2. Shared bike/e-bike systems should be expanded.
3. Supporting policies/traffic regulations should be implemented to promote the use of shared bikes/e-bikes.
4. These systems have the potential to make people's daily travelling more pleasurable.
5. These systems have the potential to make people's daily travelling more comfortable.
6. These systems have the potential to make people's daily travelling more flexible.
7. These systems have the potential to allow better access to daily travel destinations.
8. These systems have the potential to reduce traffic congestion.
9. These systems have the potential to reduce traffic emissions.
10. These systems have the potential to make the overall transport system more efficient.
11. These systems have the potential to reduce the cost of daily travelling.

4.6 Please indicate to what extent do you agree with the statements listed below about your opinions of using shared e-scooters, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.

1. Most people who are important to me would support my use of shared e-scooters.
2. I am able to use shared e-scooters if I want to.
3. I am able to use shared e-scooters while travelling with others

4.7 Please indicate to what extent do you agree with the statements listed below about your opinions of using shared bikes/e-bikes, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.

1. Most people who are important to me would support my use of shared bikes/e-bikes.
2. I am able to use shared bikes/e-bikes if I want to.
3. I am able to use shared bikes/e-bikes while travelling with others

4.8 Please indicate to what extent do you agree with the statements listed below about your daily travel, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.

Category	Statements
Mobility	<ol style="list-style-type: none"> <li>1. There is always a transport option available to me at the times I need it;</li> <li>2. I can usually travel in a way that is suited to my physical condition &amp; abilities;</li> <li>3. I always have more than one transport options while travelling from home to my regular destinations &amp; activities;</li> <li>4. I have difficulties using transport-related apps (such as Uber) on smart phones;</li> <li>5. I have difficulties getting information about available transport services;</li> <li>6. I have to rely on others for transport in daily life;</li> </ol>
Accessibility	<ol style="list-style-type: none"> <li>7. I can easily reach all my regular destinations &amp; activities;</li> <li>8. I can easily reach my workplace (or place of education) in my ideal travel time;</li> <li>9. I can easily reach the supermarket or local shopping areas in my ideal shopping travel time;</li> <li>10. I can easily reach healthcare facilities (e.g., hospital, dental, pharmacy) in my ideal visit travel time;</li> <li>11. I can easily reach friends or relatives at their home in my ideal visit travel time;</li> <li>12. I can easily reach my gym, team, place of worship, or (hobby) clubs in my ideal visit travel time;</li> </ol>

4.9 This is a control question to test that you are not answering randomly and paying attention. Please select "Disagree".

1. Totally disagree
2. Disagree
3. Neither disagree nor agree
4. Agree
5. Totally agree

4.10 Please indicate to what extent do you agree with the statements listed below about your daily travel, ranging from (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, to (5) strongly agree.

Travel cost	<ol style="list-style-type: none"> <li>1. I have to spend more money on necessary travel in a week than I can afford;</li> <li>2. I spend much more time travelling than I'd like;</li> <li>3. I feel tired or distressed while travelling to my regular destinations &amp; activities;</li> </ol>
Externalities	<ol style="list-style-type: none"> <li>4. I feel safe while travelling to my regular destinations &amp; activities;</li> <li>5. I can travel without negative consequences to my health;</li> <li>6. I am concerned about the noise while travelling to my regular destinations &amp; activities;</li> <li>7. I worry about the privacy safety of using transport-related apps.</li> </ol>

## Part 5 Life satisfaction and social connection

The following questions focus on your life satisfaction and social connections.

5.1 Using a scale from 1-7, where 1 means 'strongly disagree' and 7 means 'strongly agree', please indicate to what extent do you agree with the statements below.

1. I am satisfied with my life.
2. I am satisfied with my daily travelling.
3. I am ready to undergo personal costs to help somebody who helped me before.

5.2 Would you say that most people can be trusted, or that you can't be too careful in dealing with people?

*Please tell us what you think, where 1 means you can't be too careful and 7 means most people can be trusted.*

You can't be too careful 1 2 3 4 5 6 7 Most people can be trusted

5.3 Would you say that most of the time people try to be helpful, or that they are mostly looking out for themselves?

*Please tell us what you think, where 1 means people mostly look out for themselves and 7 means people mostly try to be helpful.*

People mostly look out for themselves 1 2 3 4 5 6 7 People mostly try to be helpful

5.4 Please indicate how often you have been in contact with others (in-person, by phone, or online).

	Daily	4-6 days a week	1-3 days a week	1-3 days a month	6-11 days a year	1-5 days a year	(Almost) Never
Close family and extended family							
Friends/intimates							
Neighbours							
Work colleagues/schoolmates (in time off work/school)							
People in my community groups (religious groups and sporting clubs, etc.)							

## Part 6 Further personal

Finally, we would like to ask you some additional questions about your personal situation. We hope that you are willing to answer these questions as this information will provide a large contribution to our research. We wish to reiterate that your information will be handled confidentially. **We wish to emphasise that this information will only be used for scientific purposes and will not be linked to your name or other personal information.**

6.1 Do you have a driver's licence to drive a car?

- 1 Yes
- 2 No

6.2 Do you have regular access to a car?

*Select all that apply*

- 1. I have sole access to my private car
- 2. I share a car with other household members
- 3. I can sometimes use a car from another household member.
- 4. I have a lease or rental car
- 5. I have regular use of one from friends
- 6. I have access through shared scheme
- 7. Other, please specify
- 8. I do not have regular access to a car

6.3 Do you have access/subscription to a car-sharing system

- 1. Yes
- 2. No

6.4 Do you own a bicycle (excluding e-bikes)?

*Select all that apply*

- 1. Yes, I own one or multiple
- 2. Yes, I have regular use of one from household members or friends
- 3. Yes, I have access through shared schemes
- 4. No
- 5. Other, please specify

6.5 Do you own an electric bicycle (or 'e-bike')?

*Select all that apply*

- 1. Yes, I own one or multiple
- 2. Yes, I have regular use of one from household members or friends
- 3. Yes, I have access through shared schemes
- 4. No
- 5. Other, please specify

6.6 Do you regularly own a season ticket for public transport?



1. Yes, (almost) always
2. Yes, sometimes
3. No

6.7 Do you own any other forms of transport?

*Select all that apply*

1. Motorcycle
2. E-scooter
3. E-skateboard
4. (E-)moped
5. Other, please specify
6. None of the above

6.8 How many hours did you spent travelling last Thursday?

1. Less than 0.5 hour
2. 0.5 – 1 hour
3. 1 – 1.5 hours
4. 1.5 – 2 hours
5. More than 2 hours

6.9 How many hours did you spent travelling last Saturday?

1. Less than 0.5 hour
2. 0.5 – 1 hour
3. 1 – 1.5 hours
4. 1.5 – 2 hours
5. More than 2 hours

6.10 Which of the below best describes your annually disposable household income?

**(Annually disposable household income, based on SEK):**

1. > 670 000 kr
2. 460 000 – 670 000 kr
3. 320 000 – 460 000 kr
4. 200 000 – 320 000 kr
5. < 200 000 kr
6. Prefer not to say

6.11 Which of the below best describes your educational qualifications?

1. Higher degree or postgraduate qualifications (e.g., M.A., MSc., M.Ed., Ph.D. etc)
2. First degree level qualification Degree, or degree level equivalent (e.g., BA; BSc)
3. Upper secondary school (Gymnasium)
4. Compulsory school (grundskola)
5. Other
6. Prefer not to say

6.12 Where were you born?

1. Sweden

2. Other Nordic countries
3. Europe
4. Africa
5. Nord America
6. South America
7. Asia, Oceania

6.13 Do you have any of the following long-standing conditions?

*Select all that apply*

Your responses are anonymous. All information will be handled confidentially and used for only research purpose.

1. Deafness or severe hearing impairment
2. Blindness or severe visual impairment
3. A condition that substantially limits basic physical activities such as walking, climbing stairs, or carrying.
4. A learning difficulty
5. A long-standing psychological or emotional condition
6. Other, please specify
7. None of the above
- 8 Prefer not to say

6.14 What is (the first part of) the postal code of your residence? (For example, if the postal code is 205 33, indicate '205')

Thank you for taking the time to complete this questionnaire for us!

Would you like to have the chance to win an Amazon coupon of 800 SEK? Join the next step of our study in which we are conducting a travel survey via an EU-tested App (TravelVu) on smartphones. This survey will last one week, and all you need to do will be to review as well as change (if needed) your trip information automatically generated in the app. This can be easily done following a brief guide we will provide.

If you are interested in taking part, please enter your e-mail address and ticking the box below. This information will be saved separately from your answers to the questionnaire

☐ I would like to participate in the travel App survey.

Name:

Email: