

Car Option Value Survey

Informed Consent

Thank you for your interest in participating in our research study! This study---conducted by researchers at the MIT Energy Initiative---collects information about your mobility options and travel choices under different scenarios.

Procedure

The study consists of a survey, which should take about 15 minutes to complete. The survey is best viewed on a larger-screen device such as a tablet or personal computer.

Risks/Discomforts

Risks are minimal for involvement in this study. However, you may feel emotionally uneasy when asked to pass judgment on certain questions.

Benefits and Participation

Participation in this research study is completely voluntary. Through your participation, researchers will learn more about how to meet the needs of travelers when providing varied transportation services.

You have the right to refuse to participate in this study or to withdraw at any time. If you desire to withdraw, please close your internet browser.

Confidentiality

This survey does not ask you for any information that can be used to identify you. All data obtained from participants will be kept strictly confidential and will only be reported in an aggregate format (as combined results), never as individual responses. The data collected will be stored in the HIPPA-compliant, Qualtrics-secure database until it has been deleted by the primary investigator. No one other than the primary investigator or assistant researchers listed below will have access to the data, unless additional permissions are received.

Questions about the Research or about your Rights as Research Participants?

If you have questions regarding this study, you may contact Dr. Joanna Moody at +1-434-409-5679 / jcmoody@mit.edu. Additional researchers on the study include Liza Farr (lfarr@mit.edu) and Prof. David R. Keith of the MIT Sloan School of Management (dkeith@mit.edu). If you have questions you do not feel comfortable asking the researcher listed above, you may contact MIT's Committee on the Use of Humans as Experimental Subjects (COUHES) via email at couhes@mit.edu or securely through the web at <https://couhes.mit.edu/contact-us>.

I have read and understood the above consent form and desire of my own free will to participate in this study

- Yes
- No

Quota/Eligibility Screening Questions

First we would like to ask you a few questions about yourself and your household.

For the purposes of this survey, a household includes all the people who occupy a housing unit (such as a house or apartment) as their usual place of residence. A household includes the related family members and all the unrelated people, if any, such as lodgers, foster children, wards, or employees who share the housing unit. A person living alone in a housing unit, or a group of unrelated people sharing a housing unit such as partners or roomers, is also counted as a household.¹

Please indicate your age: _____

[open text entry; must be number between 18 and 100]

What is your total annual household income?

[drop-down menu; single response]

- Less than \$10,000
- \$10,000 - \$14,999
- \$15,000 - \$24,999
- \$25,000 - \$34,999
- \$35,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 - \$149,999
- \$150,000 - \$199,999
- \$200,000 or more

How many cars does your household own?

[radio buttons; single response]

- Zero
- 1 car
- 2 cars
- 3 or more cars

Have you ever used a taxi service or a smartphone ride-hailing app (e.g., Uber, Lyft, or Via)?

- Yes
- No

¹ Wording matches U.S. Census definition of household: https://www.census.gov/glossary/#term_Household.

Car Pride

Please tell us about your attitudes towards **owning a car now and in the future**. If you do not own a car now, please answer the questions about general and future car ownership.

	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree
Having a car is connected with one's social image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I deserve to own and express myself with a great car	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Others would see me as more successful if I owned a better car or more cars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have achieved in life and therefore I deserve a good car	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel owning a car is a positive component of my identity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want to have a successful life and that includes owning a nicer car or more cars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please tell us about your **attitudes towards driving/using a car now and in the future**. If you do not drive a car now, please answer the questions about general and future car ownership.

	Strongly disagree	Disagree	Partially disagree	Neither agree nor disagree	Partially agree	Agree	Strongly agree
Driving meets my self esteem or personal image	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Driving a car makes me feel superior to those who don't	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Driving a car positively affects my perception of myself [Please select "somewhat disagree"]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would love to be seen more often driving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If more people saw me in/with my car, I would drive more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I gain respect from my peers because I drive a car	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Single Binary Discrete Choice: Typical Year

[Instructions shown to all respondents who will see at least one SBDC scenario—i.e., their household owns at least one car and they have used a taxi/ride-hailing service]

In the following pages, you will be presented with a series of scenarios regarding access to different travel alternatives. Please read each of these scenarios carefully before proceeding to the associated questions.

While answering these questions, please consider all of your travel needs and options throughout a typical year. **Please respond for a typical year not interrupted by a global pandemic**, for example, 2019.

Scenario 1 – Ridehailing

[Shown only to those who responded that “Yes” they have used a taxi service or a smartphone ride-hailing app in the screening questions]

In the following four questions, you are offered a choice regarding your **access to ride-hailing services including Uber, Lyft, and taxi**. You can A) give up access to all ride-hailing services for a year and receive some specific amount of money in compensation, or B) keep your access to ride-hailing and forgo that sum of money.

Everything else about your typical yearly travel needs and options remains unchanged, including access to all other transportation services.

Q. Given all your travel needs and options in a typical year, which would you prefer?

[radio buttons; single response]

- Keep access to ride-hailing services and receive no money
- Give up access to ride-hailing services for a year and receive [compensation]

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 12 possible values: {\$25, \$50, \$100, \$250, \$500, \$750, \$1,000, \$2,500, \$5,000, \$7,500, \$10,000, \$12,500}]

Scenario 2 – Private Car

[Shown only to those who responded that their household owns at least one in the screening questions]

In the following four questions, you are offered a choice regarding **access to your primary vehicle**. If your household owns multiple vehicles, **your primary vehicle is the one you personally use most often**. If you use multiple vehicles equally, please choose one of these vehicles to consider and answer all questions in this survey for that vehicle of choice.

Given your typical yearly travel needs and options, you are asked to choose whether you would prefer to: A) give up access to your primary vehicle for a year and receive some specific amount of money in compensation, or B) keep your primary vehicle and forgo that sum of money.

Everything else about your typical yearly travel needs and options remains unchanged, including access to any other vehicle your household may own that is not your primary vehicle.

Q. Given all your travel needs and options in a typical year, which would you prefer?

[radio buttons; single response]

- Keep access to my primary vehicle and receive no money
- Give up access to my primary vehicle for one year and receive [compensation]

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 16 possible values: {\$100, \$500, \$1,000, \$2,000, \$3,000, \$4,000, \$5,000, \$7,500, \$10,000, \$15,000, \$20,000, \$25,000, \$30,000, \$40,000, \$50,000, \$75,000}]

Scenario 3 – Private Car with Ridehailing

[Shown only to those who responded that their household owns at least one in the screening questions]

In the following four questions, imagine that there is a **new, ubiquitously available ride-hailing service that can serve all of the trips that you currently make by your primary vehicle** without any additional inconvenience.

Given the availability of this new ride-hailing service, you are offered a **new choice regarding access to your primary vehicle**: A) give up access to your primary vehicle in exchange for free use of this ride-hailing service and a specific amount of money in compensation, or B) keep your primary vehicle and forgo the money and free access to the new ride-hailing service.

Everything else about your typical yearly travel needs and options remains unchanged, including access to any other vehicle your household may own that is not your primary vehicle.

Q. If there were a ride-hailing service that can conveniently serve all of the trips you typically make by your primary vehicle, which would you prefer?

[radio buttons; single response]

- Keep access to my primary vehicle and receive no free ride-hailing nor money
- Give up access to my primary vehicle for one year, receive free ride-hailing, and receive [compensation]

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 16 possible values: {\$100, \$500, \$1,000, \$2,000, \$3,000, \$4,000, \$5,000, \$7,500, \$10,000, \$15,000, \$20,000, \$25,000, \$30,000, \$40,000, \$50,000, \$75,000}]

Scenario 4 – Private Car with MaaS

[Shown only to those who responded that their household owns at least one in the screening questions]

In the following four questions, imagine that you are offered **free access to all urban transportation services**. With this access to urban transportation services, **you could cover all of your current car trips with any combination of public transit, taxi, ride-hailing services (e.g., Uber and Lyft), e-scooter or bike share, car share, or short-term car rental--all for free.**

You are offered a **new choice regarding access to your primary vehicle**: A) give up access to your primary vehicle in exchange for free use of all urban transportation services and a specific amount of money in compensation, or B) keep your primary vehicle and forgo the money and the free access to all urban transportation services. With choice B, you could still use urban transportation services, but you'd have to pay the regular price for them.

Everything else about your typical yearly travel needs and options remains unchanged, including access to any other vehicle your household may own that is not your primary vehicle.

Q. If you were offered free access to all urban transportation services to serve the trips you typically make by your primary vehicle, which would you prefer?

[radio buttons; single response]

- Keep access to my primary vehicle and receive no free urban transportation services nor money
- Give up access to my primary vehicle for one year, receive free access to all urban transportation services, and receive [compensation]

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 16 possible values: {\$100, \$500, \$1,000, \$2,000, \$3,000, \$4,000, \$5,000, \$7,500, \$10,000, \$15,000, \$20,000, \$25,000, \$30,000, \$40,000, \$50,000, \$75,000}]

Typical Travel Behavior and Car Ownership Details

Now we would like to ask you a few questions about you and your household's **typical travel behavior before the coronavirus pandemic**.

Do you have a driver's license?

- Yes
- No

Are you **physically unable** to use any of the following transportation modes? Check all that apply.

[check boxes; allow multiple responses]

- Driving a car
- Public transit, including bus or train
- Ride-hailing (e.g. Uber, Lyft, Taxi)
- Bicycle or scooter
- None of the above [exclusive answer]

In a typical month before the coronavirus pandemic how many times did you purchase a ride from a taxi service or a smartphone ride-hailing app (e.g., Uber, Lyft, or Via)?

[radio buttons; single response]

- Zero times
- 1-3 times
- 4-10 times
- More than 10 times

In a typical week during a time **not interrupted by the coronavirus pandemic**, how many trips do you make using each of the following transportation modes?

A trip can include any travel among home, work, school, shopping, food, recreation, healthcare or any other services/facilities, etc. Round trips count as 2 trips.

- Personal car as driver
- Personal car as passenger
- Public transit - bus
- Public transit - train
- Car rental or car share (e.g. Zipcar, Getaround)
- Ride-hailing - private ride (e.g. UberX, Lyft, Taxi)
- Ride-hailing - pooled ride (e.g. UberPool, Shared Lyft)
- Shared bike or e-scooter (e.g. Lime, Jump)
- Personal bike
- Walking
- Motorcycle or moped
- Other. Please specify: _____

Does your employer provide any of the following benefits? Please select all that apply

- Subsidized or free parking
- Discounted or free transit pass
- Carpooling or other program to encourage taking non-single-occupancy vehicles to work
- Shower, indoor bike parking, or other bike commuting amenities
- None of the above [exclusive answer]

In a typical month before the coronavirus pandemic, how much did your household spend on transportation-related costs not including long distance travel? (in hundreds of dollars)

[slider bar from 0 to 15 in hundreds of dollars (\$100)]

Zero Car Households

You indicated that your household does not own a car. We would like to ask you a few questions about why your household has made this choice.

What are the **three most important reasons** for why you do not own a car?

[check boxes; multiple responses; order of response options randomized]

- It is unaffordable
- It is more convenient to use non-car transportation options
- Environmental reasons
- Finding parking is too expensive or inconvenient
- I don't know how to drive or am not comfortable driving
- I am physically unable to drive
- I have easy access to borrowing a car
- Other: _____

Would you prefer to own a car if you could?

[radio buttons; single response]

- Yes
- No

Do you or another member of your household intend to purchase a car in the future?

[radio buttons; single response]

- Yes, in the next 2 months
- Yes, in the next 6 months
- Yes, in the next year
- Yes, in the next 5 years
- Yes, but further in the future
- No, we are not planning to purchase a car in the future

If your household owned one car, what do you estimate your average monthly household transportation costs would be? (in hundreds of dollars)

[slider bar from 0 to 15 in hundreds of dollars (\$100)]

Car-Owning Households

You indicated that your household owns a car. We would like to ask you a few more questions about your household car ownership.

Do you or another member of your household intend to purchase an **additional car** in the future? This excludes the purchase of a new car as a replacement for an existing car.

[radio buttons; single response]

- Yes, in the next 2 months
- Yes, in the next 6 months
- Yes, in the next year
- Yes, in the next 5 years

- Yes, but further in the future
- No, we are not planning to purchase an additional car

Please estimate how much your household spends on car ownership in a typical month (in hundreds of dollars).

Consider the costs of owning and operating all vehicles in the household, not just your primary vehicle.

[slider bar from 0 to 15 in hundreds of dollars (\$100)]

For the following questions, please refer only to your **primary vehicle**. If your household owns multiple vehicles, your primary vehicle is the one you use most often. If you use multiple vehicles equally, please choose one of these vehicles to consider.

Please select the make and model of your primary vehicle.

[drop-down menus; populated by EPA database]

Make: _____

Model: _____

Please select the model year of the vehicle you specified above.

[drop-down menu; “1990 or older” through 2021]

Is your primary vehicle an integral part of your economic livelihood (other than serving a typical commute)?

[radio buttons; single response]

- Yes
- No

If Yes is selected above: How is your primary vehicle an integral part of your economic livelihood?

Please select all that apply.

[check boxes; allow multiple responses; answer option order randomized]

- I drive for a taxi company
- I drive for a passenger mobility service like Uber or Lyft
- I drive for a food or goods delivery service like Postmates, Grubhub, Caviar, etc.
- I need my car to transport work equipment
- I have no fixed work location and must drive to different job sites
- Other: _____

What are the **three most important reasons** why you would be reluctant to give up your **primary vehicle**?

[check boxes; multiple responses; order of response options randomized]

- Lack of availability of alternative options
- My car is the cheapest alternative for me
- My car is the fastest alternative for me
- Need to transport other people (children, elderly relatives, etc.)
- Need to transport goods or equipment
- Need for storage space
- Certainty and reliability of being able to use my own car at any time, any place
- The flexibility the car provides

- Control over my own travel schedule that my own car provides
- Communication of status or values
- Sentimental attachment
- Comfort with using my own car compared to using other modes
- Cleanliness of my car compared to other modes
- The safety and security from using my own car compared to using other modes
- The privacy that using my car provides
- Other. Please specify: _____

Direct Valuations

[Following three questions shown only to those who responded that their household owns at least one in the screening questions]

Given all of your travel needs and options in a typical year, how much would you need to be paid (minimum acceptable amount) for you to **give up access to your primary vehicle** for one year?

[slider bar; 0 to 75 in \$1,000]

Assume you are given **free access to a ride-hailing service that could serve all of the trips that you typically make by car**. How much would you need to be paid (minimum acceptable amount) for you to give up access to your primary vehicle for one year?

[slider bar; 0 to 75 in \$1,000]

Assume you are given **free access to all urban mobility services**. This means you could cover all your current car trips for free with any of the public transit, ride-hailing services like Uber and Lyft, e-scooter share/bike share, car share, or short-term car rental (up to one day) services typically available to you.

How much would you need to be paid (minimum acceptable amount) for you to give up access to your primary vehicle for one year?

[slider bar; 0 to 75 in \$1,000]

If "Yes" respondent reports having used a taxi service or a smartphone ride-hailing app in the screening questions.

How much would you need to be paid (minimum acceptable amount) for you to **give up all access to taxi and ride-hailing services for one year**?

[slider bar from 0 to 12.5 in \$1,000]

Coronavirus Perceptions and Travel

Now we would like to ask you a few questions about your perceptions of the novel human coronavirus (COVID-19) and general actions you are taking to mitigate your risk of infection.

Please indicate your level of agreement with the following statements about the novel human coronavirus.

- | | Strongly agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Strongly disagree |
|-------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------------------|-------------------|-------------------|
| • The novel coronavirus presents a serious health risk to me personally | | | | | |
| • The novel coronavirus presents a serious health risk to others | | | | | |
| • I feel that I am personally likely to contract the novel coronavirus | | | | | |
| • I feel that others are likely to contract the novel coronavirus | | | | | |
| • I am confident that appropriate and effective protective actions exist to respond to the novel coronavirus | | | | | |
| • I am confident in my ability to engage in appropriate and effective protective actions in response to the novel coronavirus | | | | | |

Have you taken any of the following actions to limit your risk of being infected by the novel coronavirus? Please select all that apply.

- Made sure to get sufficient sleep
- Wore a mask
- Took an herbal supplement
- Ate a balanced diet
- Avoided large gatherings of people
- Avoided specific types of people
- Washed hands more often
- Used disinfectants
- Was more attentive to cleanliness
- Did not go to work or school
- Avoided shaking hands
- Avoided travel by airplane
- Avoided travel by taxis or ridehailing
- Avoided travel on subways or buses
- Avoided eating in restaurants
- Exercised regularly
- Other (please specify)

How has your household income been affected by the coronavirus pandemic?

- Very negatively
- Negatively
- Not affected
- Positively
- Very positively

Changes in Travel

Now, we would like to know more about how the coronavirus pandemic is affecting your travel.

In the past month during the coronavirus pandemic, how many times did you purchase a ride from a taxi service or a smartphone ride-hailing app (e.g., Uber, Lyft, or Via)?

[radio buttons; single response]

- Zero times
- 1-3 times
- 4-10 times
- More than 10 times

In the past week during **the coronavirus pandemic**, how many trips did you make using each of the following transportation modes?

A trip can include any travel among home, work, school, shopping, food, recreation, healthcare or any other services/facilities, etc. Round trips count as 2 trips.

- Personal car as driver
- Personal car as passenger
- Public transit - bus
- Public transit - train
- Car rental or car share (e.g. Zipcar, Getaround)
- Ride-hailing - private ride (e.g. UberX, Lyft, Taxi)
- Ride-hailing - pooled ride (e.g. UberPool, Shared Lyft)
- Shared bike or e-scooter (e.g. Lime, Jump)
- Personal bike
- Walking
- Motorcycle or moped
- Other. Please specify: _____

Work from Home

Now we would like to ask you about your employment and working environment during the coronavirus pandemic.

What most closely indicates your current employment status?

[drop-down menu]

- Employed: full time
- Employed: part time
- Contributing family worker (assist in the operation of family business without receiving regular wages)
- Furloughed with pay
- Furloughed without pay
- Unemployed: looking for work
- Unemployed: unable to work or not looking for work
- Retired
- Student
- Military

Have you been designated as an essential worker during the coronavirus pandemic?

- Yes
- No

Before the coronavirus outbreak, did you have a fixed school and/or workplace?

- Yes: school and/or workplace away from home
- Yes: school and/or work at home
- No: was working or attending school but not at a fixed location
- No: was not employed or going to school

If “Unemployed: looking for work,” “Unemployed: unable to work or not looking for work,” “Furloughed with pay,” or “Furloughed without pay” is selected:

Did you lose your employment or become furloughed due to the coronavirus pandemic?

- Yes
- No

If “Yes: school and/or workplace away from home” or “No: was working or attending school but not at a fixed location” is selected.

Do you have the option/capability for conducting your work/classroom activities remotely?

- Yes
- No

Before the coronavirus outbreak, what percentage of your work/classroom activities did you conduct remotely? Classroom activities do not include homework.

(If your response is 0%, click on the slider to confirm)

[slider bar; 0-100%]

In the past month during the coronavirus outbreak, what percentage of your work/classroom activities have you conducted remotely? Classroom activities do not include homework.

(If your response is 0%, click on the slider to confirm)

[slider bar; 0-100%]

Once the coronavirus outbreak is resolved, what percentage of your work/classroom activities do you hope to conduct remotely? Classroom activities do not include homework.

(If your response is 0%, click on the slider to confirm)

[slider bar; 0-100%]

How effectively do you complete your work/school activities remotely **during the coronavirus pandemic** compared to when you are in the office/classroom?

- I am much less efficient when conducting activities remotely
- I am less efficient when conducting activities remotely
- I am equally as efficient when conducting activities remotely
- I am more efficient when conducting activities remotely
- I am much more efficient when conducting activities remotely

Binary Discrete Choice: Month of COVID

In the following pages, you will again be presented with a series of scenarios regarding access to different travel alternatives. For these questions, we ask you to consider your travel needs and options **during the past month (in the midst of the coronavirus pandemic)**.

Scenario 1 – Ridehailing

In the following four questions, you are offered a choice regarding your **access to ride-hailing services including Uber, Lyft, and taxi during a month of the coronavirus pandemic**. You can A) give up access to all ride-hailing services for a year and receive some specific amount of money in compensation, or B) keep your access to ride-hailing and forgo that sum of money.

Everything else about your current travel needs and options during the coronavirus pandemic remains unchanged, including access to all other transportation services.

Q. Given all your travel needs and options in a month of the coronavirus pandemic, which would you prefer?

[radio buttons; single response]

- Keep access to ride-hailing services and receive no money
- Give up access to ride-hailing services for a month and receive [compensation]

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 12 possible values: {\$2, \$4, \$8, \$20, \$40, \$60, \$80, \$200, \$425, \$650, \$800, 1,000}]²

Scenario 2 – Private Car

In the following four questions, you are offered a choice regarding **access to your primary vehicle during a month of the coronavirus pandemic**. You are asked to choose whether you would prefer to: A) give up access to your primary vehicle for a year and receive some specific amount of money in compensation, or B) keep your primary vehicle and forgo that sum of money.

Everything else about your current travel needs and options during the coronavirus pandemic remains unchanged, including access to any other vehicle your household may own that is not your primary vehicle.

Q. Given all your travel needs and options in a month of the coronavirus pandemic, which would you prefer?

[radio buttons; single response]

- Keep access to my primary vehicle and receive no money
- Give up access to my primary vehicle for a month and receive [compensation]

² Yearly values: {\$25, \$50, \$100, \$250, \$500, \$750, \$1,000, \$2,500, \$5,000, \$7,500, \$10,000, \$12,500}
Divided by 12: {\$2, \$4, \$8, \$21, \$42, \$63, \$83, \$208, \$417, \$625, \$833, 1,042}
Rounded: {\$2, \$4, \$8, \$20, \$40, \$60, \$80, \$200, \$425, \$650, \$800, 1,000}

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 16 possible values: {\$10, \$40, \$80, \$150, \$250, \$300, \$400, \$625, \$800, \$1,250, \$1,500, \$2,000, \$2,500, \$3,000, \$4,000, \$6,250}]³

Scenario 3 – Private Car with Ridehailing

In the following four questions, imagine that there is a **new, ubiquitously available ride-hailing service that can serve all of the trips that you currently make by your primary vehicle** without any additional inconvenience.

Given the availability of this new ride-hailing service, you are offered a **new choice regarding access to your primary vehicle during a month of the coronavirus pandemic**: A) give up access to your primary vehicle in exchange for free use of this ride-hailing service and a specific amount of money in compensation, or B) keep your primary vehicle and forgo the money and free access to the new ride-hailing service.

Everything else about your travel needs and options during the coronavirus pandemic remains unchanged, including access to any other vehicle your household may own that is not your primary vehicle.

Q. If there were a ride-hailing service that can conveniently serve all of the trips you make by your primary vehicle in a month of the coronavirus pandemic, which would you prefer?

[radio buttons; single response]

- Keep access to my primary vehicle and receive no free ride-hailing nor money
- Give up access to my primary vehicle for a month, receive free ride-hailing, and receive [compensation]

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 16 possible values: {\$10, \$40, \$80, \$150, \$250, \$300, \$400, \$625, \$800, \$1,250, \$1,500, \$2,000, \$2,500, \$3,000, \$4,000, \$6,250}]

Scenario 4 – Private Car with MaaS

In the following four questions, imagine that you are offered **free access to all urban transportation services**. With this access to urban transportation services, **you could cover all of your current car trips with any combination of public transit, taxi, ride-hailing services (e.g., Uber and Lyft), e-scooter or bike share, car share, or short-term car rental--all for free**.

You are offered a **new choice regarding access to your primary vehicle during a month of coronavirus pandemic**: A) give up access to your primary vehicle in exchange for free use of all urban transportation services and a specific amount of money in compensation, or B) keep your

³ Yearly values: {\$100, \$500, \$1,000, \$2,000, \$3,000, \$4,000, \$5,000, \$7,500, \$10,000, \$15,000, \$20,000, \$25,000, \$30,000, \$40,000, \$50,000, \$75,000}

Divided by 12: {\$8, \$42, \$83, \$167, \$250, \$333, \$417, \$625, \$833, \$1,250, \$1,667, \$2,083, \$2,500, \$3,333, \$4,167, \$6,250}

Rounded: {\$10, \$40, \$80, \$150, \$250, \$300, \$400, \$625, \$800, \$1,250, \$1,500, \$2,000, \$2,500, \$3,000, \$4,000, \$6,250}

primary vehicle and forgo the money and the free access to all urban transportation services. With choice B, you could still use urban transportation services, but you'd have to pay the regular price for them.

Everything else about your travel needs and options during the coronavirus pandemic remains unchanged, including access to any other vehicle your household may own that is not your primary vehicle.

Q. If you were offered free access to all urban transportation services to serve the trips you typically make by your primary vehicle during a month of coronavirus pandemic, which would you prefer?

[radio buttons; single response]

- Keep access to my primary vehicle and receive no free urban transportation services nor money
- Give up access to my primary vehicle for a month, receive free access to all urban transportation services, and receive [compensation]

[Each respondent answers 4 questions, each with a different compensation amount randomly selected from 16 possible values: {\$10, \$40, \$80, \$150, \$250, \$300, \$400, \$625, \$800, \$1,250, \$1,500, \$2,000, \$2,500, \$3,000, \$4,000, \$6,250}]

Best-Worst Scaling

[Respondents are randomly assigned either: 1) the before coronavirus scenario, in which they are asked imagine giving up one item for a month or 2) the during coronavirus scenarios, in which they are asked to value giving up an item for a month.]

Before Coronavirus Scenario (Year)

Q. Please imagine that you have to **give up access to a service or amenity for one year**. Considering the options below, which would be the best option, and which would be the worst option to give up for one year?

[MaxDiff question type; each respondent sees 10 questions, each with a randomly selected mobility good, other good, and earning amount]

Worst option		Best option
<input type="radio"/>	[Mobility good]	<input type="radio"/>
<input type="radio"/>	[Other good]	<input type="radio"/>
<input type="radio"/>	[Earning]	<input type="radio"/>

Values are randomly selected from the following choice sets:

Mobility good	Other good	Earning
1. No access to personal car	1. No toilets in the home	1. Earning \$100 less
2. No access to bus	2. No TVs in the home	2. Earning \$200 less
3. No access to train	3. No access to all e-mail services	3. Earning \$500 less
4. No access to exclusive ride-hailing services (e.g., UberX or Lyft Classic)	4. No access to online maps	4. Earning \$1,000 less
5. No access to pooled ride-hailing services (e.g., UberPOOL or Lyft Shared)	5. No access to a smart phone	5. Earning \$2,000 less
6. No access to personal bike	6. No access to a personal computer or laptop	6. Earning \$5,000 less
7. No access to airline travel	7. No meeting with friends in person	7. Earning \$10,000 less
8. No access to bike or scooter share		8. Earning \$15,000 less
9. No access to car rental or car sharing (e.g., Zipcar)		9. Earning \$20,000 less

During Coronavirus Scenario (Month)

The following set of questions will show you three different items. You will be asked to imagine you must **give up one of these items for a month (in the midst of the coronavirus pandemic)**.

You will then be asked to select which of these items you would be most happy giving up (**best option**), and which one you would be least happy giving up (**worst option**) given your current travel needs and options during the coronavirus pandemic.

Q. Please imagine that you have to **give up access to one service or amenity for an entire month during the coronavirus pandemic**. Considering the options below and your current circumstances, which would be the **best option**, and which would be the **worst option** to give up for one month?

[MaxDiff question type; each respondent sees 10 questions, each with a randomly selected mobility good, other good, and earning amount]

Worst option		Best option
<input type="radio"/>	[Mobility good]	<input type="radio"/>
<input type="radio"/>	[Other good]	<input type="radio"/>
<input type="radio"/>	[Earning]	<input type="radio"/>

Values are randomly selected from the following choice sets. Mobility goods and other goods are the same as for the before coronavirus scenario. Earnings are approximately equal to the yearly values given in the before coronavirus scenario divided by 12 (months), but rounded to the nearest \$5 increment:

Mobility good	Other good	Earning
1. No access to personal car	1. No toilets in the home	1. Earning \$5 less
2. No access to bus	2. No TVs in the home	2. Earning \$15 less
3. No access to train	3. No access to all e-mail services	3. Earning \$40 less
4. No access to exclusive ride-hailing services (e.g., UberX or Lyft Classic)	4. No access to online maps	4. Earning \$85 less
5. No access to pooled ride-hailing services (e.g., UberPOOL or Lyft Shared)	5. No access to a smart phone	5. Earning \$165 less
6. No access to personal bike	6. No access to a personal computer or laptop	6. Earning \$415 less
7. No access to airline travel	7. No meeting with friends in person	7. Earning \$830 less
8. No access to bike or scooter share		8. Earning \$1,250 less
9. No access to car rental or car sharing (e.g., Zipcar)		9. Earning \$1,665 less

Sociodemographics

The survey is almost done! Could you please answer a few more questions about yourself before you go?

Please enter your **home** zip code. _____

[open text entry; valid U.S. postal code only]

If “Yes: school and/or workplace away from home” is selected previously:

Please enter your **work** zip code. _____

[open text entry; valid U.S. postal code only]

With which gender do you most identify?

[radio buttons; single response]

- Male
- Female
- Other or prefer not to say

Please indicate the highest level of education you have attained/completed.

[radio buttons; single response]

- Less than high school diploma
- High school diploma or equivalent (GED)
- Some college, no degree
- 2+ year college/Associates Degree
- 4+ year college/Bachelors Degree
- Masters Degree
- Doctoral or Professional degree (PhD, M.D., J.D., etc.)

What is your race? Please select all that apply.

[check boxes; allow multiple responses]

- White or Caucasian
- Black or African American
- American Indian or Alaska Native
- Asia
- Native Hawaiian or other Pacific Islander
- Other: _____

Are you Hispanic or Latino?

- Yes
- No

How many people are there in your household (including yourself)?

[drop-down menu; 1 to 7 or more]

How many working adults are there in your household (including yourself)?

[drop-down menu; 0 to 5 or more]

How many children (aged 16 and younger) are there in your household?

[drop-down menu; 0 to 5 or more]