Letter of Information: Letter of information (Click to download)

- 1. Please select "Accept" if you have read the letter of information and agree to participate in this study.
 - a. Acceptb. Decline

Page Break

We anticipate that this survey will take around 15 minutes to complete. You will be asked questions in five sections (Parts 1-5). You can track your progress with the bar at the top of the screen.

In the rest of the survey, you will be asked several questions related to the last trip. You should refer to your recent trip to [DESTINATION] as the last trip.

Part 1: Travel experience

This part of the questionnaire is related to expressing the details of the trip you made to [DESTINATION] and related travel experiences.

2. Where did you start your trip to [DESTINATION]? Please enter the name of state and zip code.

State: [short answer]
Zip code: [short answer]

3. On average, what was the **one-way travel time** of this trip?

Hours: [short answer]
Minutes: [short answer]

4. In dollars, approximately, how much did you spend on gas **one-way**? If your vehicle was electric, please input the cost incurred to charge the vehicle. You can input half of the total cost you paid for the gas/electricity during the whole trip.

[short answer]

- 5. What vehicle did you drive for the trip?
 - a. A vehicle owned/leased by your household
 - b. A rented vehicle
 - c. A vehicle borrowed from family, friend, or peer
- 6. Which of the following are true about the vehicle you drove for the trip? Select all that apply.
 - a. Was a sedan or hatchback.
 - b. Was an SUV.
 - c. Was a truck.
 - d. Was a recreational vehicle (e.g., RV)

- e. Was an electric vehicle.
- f. Other (please specify):
- 7. Which of the following features did the vehicle you drove for the trip have? Check all that apply.
 - a. Blind-spot monitoring.
 - b. Lane departure warning or lane-keep assistance.
 - c. Adaptive cruise control.
 - d. Automatic emergency braking.
 - e. Driver monitoring.
 - f. Parking assistance.
 - g. Forward/backward collision warning.
 - h. None of the above.
 - i. Don't know.
- 8. Who were your travel companions? Input the number of other people present in your vehicle based on your relationship with them.
 - a. Spouse
 - b. Children
 - c. Siblings
 - d. Other family members
 - e. Friends
 - f. Other (please specify):
- 9. What percentage of time or distance did you drive yourself on the overall trip? Consider both the trip to [DESTINATION] and the return trip to home.
 - a. I didn't drive at all.
 - b. 0-25 %
 - c. 25-50%
 - d. 50-75%
 - e. 75-100%
 - f. I was the only one who drove for the whole trip.
- 10. Did you experience any of the following during the trip? Select all that apply.
 - a. Rain
 - b. Snow
 - c. Low visibility
 - d. Congestion
 - e. Witnessed a crash
 - f. Involved in a crash
 - g. Other (please specify):
 - h. None of the above
- 11. Which of the following activities did you do in-vehicle during the trip? Consider the activities you did both ways. Select all that apply.
 - a. Listening to music, radio, or other audio

- b. Singing, dancing
- c. Interacting with other passengers
- d. Talking on phone
- e. Texting, emailing, or other messaging; teleconference
- f. Reading newspapers, books, websites, etc.
- g. Using social websites or apps (Facebook, Instagram, Twitter, LinkedIn, etc.)
- h. Watching movies / TV / other entertainment
- i. Playing games
- j. Working or studying
- k. Caring for or playing with children or pets
- 1. Eating food, drinking beverage, smoking
- m. Sleeping or snoozing
- n. Viewing scenery; watching people
- o. Thinking or daydreaming
- p. Watching the road
- q. Other (please specify):
- 12. How useful or worthwhile would you rate the time you spent traveling?
 - a. Mostly wasted
 - b. Somewhat wasted
 - c. Neither wasted nor useful
 - d. Somewhat useful
 - e. Mostly useful
- 13. For each of the following pairs, select the choice that best corresponds to your overall experience on your trip to [DESTINATION]. Consider the trip both ways.
 - a. I was very distressed content.
 - b. I was very tense relaxed.
 - c. I was very sad happy.
 - d. I was very tired energized.
 - e. I was very bored enthusiastic.
 - f. My trip was displeasing enjoyable.
 - g. My trip went poorly smoothly.
 - h. My trip was the worst best I can imagine.
 - i. I was worried I wouldn't confident I would arrive on time.
- 14. How long did you stay in [DESTINATION]?
 - a. Stayed for less than 1 hour, without night stay.
 - b. Stayed for 1-4 hours, without night stay.
 - c. Stayed for 4-8 hours, without night stay.
 - d. Stayed for 1 night.
 - e. Stayed for 2 nights.
 - f. Stayed for more than 2 nights.
- 15. How would you rate your overall satisfaction with this visit to [DESTINATION]?
 - a. Extremely dissatisfied

	1
b.	2
c.	3
d.	4
e.	5+
	Neutral Somewhat likely
	Extremely likely

b. Somewhat dissatisfied

d. Somewhat satisfiede. Extremely satisfied

c. Neither satisfied nor dissatisfied

Part 2: Autonomous vehicle scenario

This is the second part of the survey. Here you will be asked several questions involving autonomous vehicles.

- 18. Before we start, we would like to know your familiarity with autonomous vehicle technology. How familiar are you with autonomous vehicles and/or their technologies?
 - a. Not familiar at all
 - b. Slightly familiar
 - c. Moderately familiar
 - d. Very familiar
 - e. Extremely familiar
- 19. Please read the definition of an autonomous vehicle below before proceeding forward.

An autonomous vehicle (AV) is a vehicle having full self-driving capabilities such that no driver is needed to drive (SAE level 5, <u>click here to learn more</u>). The vehicle uses various in-vehicle technologies and sensors to drive itself.

- 20. Consider if you had the option of using an autonomous vehicle instead of the current vehicle for your trip to [DESTINATION]. In this situation, how likely is it that you would use the autonomous vehicle instead of the current vehicle?
 - a. Extremely unlikely
 - b. Somewhat unlikely
 - c. Neutral
 - d. Somewhat likely
 - e. Extremely likely
- 21. Hypothetically, consider that the vehicle you drove on the last trip was an autonomous vehicle having self-driving capability, but you also had an option of driving that autonomous vehicle in manual mode (i.e., you can drive the autonomous vehicle like a human-driven vehicle). In that scenario, what percentage of the trip would you switch to manual drive mode? You must select 0% if you don't want to switch to manual mode and 100% if you want to drive manually for the complete trip. Select your preference for both going and returning trips separately below.
 - a. On going trip (one-way)
 - b. On returning trip (one-way)
 - i. 0%
 - ii. 25%
 - iii. 50%
 - iv. 75%
 - v. 100%

- 22. Hypothetically, consider that you drove in an autonomous vehicle instead of your vehicle during the last trip so that you didn't have to drive. In this scenario, which of the following activities would you do while traveling? Consider the trip both ways. Select all that apply.
 - a. Listening to music, radio, or other audio
 - b. Singing, dancing
 - c. Interacting with other passengers
 - d. Talking on phone
 - e. Texting, emailing, or other messaging; teleconference
 - f. Reading newspapers, books, websites, etc.
 - g. Using social websites or apps (Facebook, Instagram, Twitter, LinkedIn, etc.)
 - h. Watching movies / TV / other entertainment
 - i. Playing games
 - j. Working or studying
 - k. Caring for or playing with children or pets
 - 1. Eating food, drinking beverage, smoking
 - m. Sleeping or snoozing
 - n. Viewing scenery; watching people
 - o. Thinking or daydreaming
 - p. Watching the road
 - q. Other:
- 23. How useful or worthwhile would you rate the time you spent traveling in an autonomous vehicle for this hypothetical trip scenario?
 - a. Mostly wasted
 - b. Somewhat wasted
 - c. Neither wasted nor useful
 - d. Somewhat useful
 - e. Mostly useful
- 24. In the future, when autonomous vehicles are available, how would the number of long-distance recreational trips you make in a typical year change?
 - a. Much less than current
 - b. Somewhat less than current
 - c. About the same as current
 - d. Somewhat more than current
 - e. Much more than current
- 25. In the future, when autonomous vehicles are available, your long-distance recreational trips would most likely be ...
 - a. ... much shorter distance than current.
 - b. ... somewhat shorter distance than current.
 - c. ... about the same distance as current.
 - d. ... somewhat further distance than current.
 - e. ... much further distance than current.

- 26. Suppose you had two additional mobility options (along with your current mode) to travel for your trip to [DESTINATION] and cost wouldn't be the issue. First was an autonomous vehicle having the self-driving ability, and second was teleportation where you could snap your fingers or blink your eyes and be instantly transported to wherever you want. In this scenario, which option would you choose for your last trip to [DESTINATION]? Please rank these three options based on your preference such that the first ranked option (1) is the most preferred and the last ranked (3) is the least preferred.
 - a. The same vehicle you drove for the last trip.
 - b. An autonomous vehicle with self-driving capability.
 - c. Instantaneous teleportation.

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Part 3: Stated choice experiment

- 27. For the following four questions, you will be given the following three vehicle options to choose from:
 - 1. Current vehicle.
 - 2. Autonomous vehicle with current vehicle interior.
 - 3. Autonomous vehicle with work and leisure interior.
- 1. Current vehicle refers to the vehicle you used to get to [DESTINATION] and return.
- **2. Autonomous vehicle with current vehicle interior** refers to the self-driving vehicle with interior vehicle design same as that of your current vehicle. Thus, consider this vehicle option as same as your current vehicle but with the self-driving ability so that you don't have to drive.
- 3. Autonomous vehicle with work and leisure interior refers to the self-driving vehicle where the interior vehicle design is friendly for work and leisure activities. In this vehicle option, the seats are comfortable for sleeping or relaxing, Wi-Fi is available for leisure or work, a table can be pulled for work, charging ports are available for laptops and smartphones, etc. You can expect to do work or leisure activities inside this vehicle without the responsibility of driving.

Consider all three vehicle options were available for you to choose for your last trip to [DESTINATION], which option would you prefer? Each vehicle option had different travel time and cost associated. The values of the travel time and travel cost in the options presented below are around the values you experienced one-way on the last trip which are [TT] and [TC] respectively.

[Only one block among the following three will be presented to each respondent randomly. TT and TC refer to the one-way travel time and cost experienced by the respondent respectively.]

Block I

28. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	TT	1.2 * TT	TT
Travel Cost	TC	1.2 * TC	1.2 * TC
Choice			

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	1.2 * TT	TT	1.2 * TT
Travel Cost	TC	TC	0.8 * TC
Choice			

30. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	TT	0.8 * TT	TT
Travel Cost	1.2 * TC	0.8 * TC	1.2 * TC
Choice			

31. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	0.8 * TT	TT	0.8 * TT
Travel Cost	0.8 * TC	TC	0.8 * TC
Choice			

Block II

32. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	TT	1.2 * TT	TT
Travel Cost	TC	0.8 * TC	0.8 * TC
Choice			

33. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	TT	0.8 * TT	TT
Travel Cost	1.2 * TC	1.2 * TC	0.8 * TC
Choice			

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	1.2 * TT	0.8 * TT	1.2 * TT
Travel Cost	0.8 * TC	TC	1.2 * TC
Choice			

35. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	0.8 * TT	1.2 * TT	0.8 * TT
Travel Cost	TC	TC	1.2 * TC
Choice			

Block III

36. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	1.2 * TT	TT	0.8 * TT
Travel Cost	0.8 * TC	0.8 * TC	TC
Choice			

37. Which option would you prefer? (click here if you are not clear with the definitions)

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	0.8 * TT	TT	1.2 * TT
Travel Cost	0.8 * TC	1.2 * TC	TC
Choice			

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	1.2 * TT	TT	0.8 * TT
Travel Cost	1.2 * TC	1.2 * TC	TC
Choice			

Attributes	Current vehicle	Autonomous vehicle with current vehicle interior	Autonomous vehicle with work and leisure interior
Travel Time	0.8 * TT	TT	1.2 * TT
Travel Cost	1.2 * TC	0.8 * TC	TC
Choice			

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Part 4: Perception of autonomous vehicles and other attributes

You completed more than two-thirds of the survey! You will be finished soon. In this fourth part of the survey, you will be asked to rate several statements about autonomous vehicles and general attributes.

- 40. To what extent do you agree or disagree with the following statements about autonomous vehicles (AVs)?
 - a. AVs will drive me safely to wherever I want.
 - b. Using an AV will improve my (and others') driving efficiency.
 - c. I could multitask while traveling in an AV (e.g., work, sleep, surf the internet).
 - d. Using an AV will reduce my driving burden/stress.
 - e. AVs will improve the mobility of overall transportation.
 - f. AVs will offer economic and social benefits overall.
- 41. To what extent do you agree or disagree with the following statements about autonomous vehicles (AVs)?
 - a. I would feel comfortable having an AV pickup/drop off children without adult supervision.
 - b. I am concerned about the potential failure of AV sensors, equipment, technology, and system safety.
 - c. I am concerned about the legal liability for drivers or owners of AVs in case of accidents/crashes.
 - d. AVs would make me feel safer on the streets as a pedestrian or as a bicyclist.
 - e. AVs would perform well even in poor weather or other unexpected conditions.
 - f. I am concerned about the data privacy and security breach/hacking in AVs.
 - g. I am worried about the higher purchase, maintenance, and insurance costs associated with AVs.
- 42. To what extent do you agree or disagree with the following statements about yourself?
 - a. I like to be among the first to have the latest technology.
 - b. Learning how to use new technology is often frustrating for me.
 - c. Having internet connectivity everywhere I go is important to me.
- 43. To what extent do you agree or disagree with the following statements about yourself in general?
 - a. I enjoy driving myself.
 - b. I feel safer driving myself rather than others driving me.
 - c. I prefer not to have the responsibility of driving.
 - d. I feel stressed or nervous when driving.
 - e. I enjoy driving during recreational travel.
- 44. To what extent do you agree or disagree with the following statements about yourself?
 - a. I like to be engaged in two or more activities simultaneously.
 - b. I believe people should aim at performing multiple tasks simultaneously.
 - c. It makes me feel good to be involved in multiple activities simultaneously.

- 45. To what extent do you agree or disagree with the following statements about yourself?
 - a. I am concerned about current environmental pollution and its impact on health.
 - b. I don't change my behavior based solely on concern for the environment.
 - c. I rarely worry about the effects of pollution on myself and my family.
- 46. When autonomous vehicles (AVs) are available in the market, how likely do you think that you would ...?
 - a. ... ride in an AV
 - b. ... purchase an AV
 - c. ... recommend your family member, friends, and peers to purchase an AV
 - d. ... purchase and/or use an AV if it is electric
- 47. Suppose autonomous vehicles (AVs) are available in the market now, how long would your household wait to purchase an AV?
 - a. My household won't purchase an AV.
 - b. Within less than 1 year from now.
 - c. Within 1-2 years from now.
 - d. Within 2-5 years from now.
 - e. Within 5-10 years from now.
 - f. After more than 10 years from now.

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Part 5: Sociodemographic and travel characteristics

In this last part of the survey, you will be asked to provide your socio-demographic and individual travel characteristics.

- 48. What is your age?
 - a. 18 to 24 years
 - b. 25 to 34 years
 - c. 35 to 44 years
 - d. 45 to 54 years
 - e. 55 to 64 years
 - f. 65 to 74 years
 - g. 75 to 84 years
 - h. 85 years and above
 - i. Prefer not to answer
- 49. How do you describe yourself? Check all that apply.
 - a. White
 - b. Black or African American
 - c. American Indian or Alaska Native
 - d. Asian
 - e. Native Hawaiian or Pacific Islander
 - f. Hispanic or Latino
 - g. Other (please specify): ...
 - h. Prefer not to answer
- 50. How do you describe your gender?
 - a. Female
 - b. Male
 - c. Prefer to self-describe (please specify): ...
 - d. Prefer not to answer
- 51. What is the highest degree or level of school you have completed?
 - a. Not a high school graduate, grade 12 or less
 - b. High school diploma or equivalent (e.g., GED)
 - c. Bachelor's or associate degree
 - d. Graduate degree or higher
 - e. Prefer not to answer
- 52. Are you currently enrolled in any type of school?
 - a. Yes, full-time
 - b. Yes, part-time
 - c. No
- 53. How many people of 18 years or older (including yourself) live in your household?
 - a. 1 (just me)

b. 2
c. 3
d. 4
e. 5
f. 6
g. 7
h. 8+
54. How many people of below 18 years live in your household?
a. 0
b. 1
c. 2
d. 3
e. 4+
55. What is your approximate total household income (before taxes)?
a. Less than \$10,000
b. \$10,000 to \$14,999
c. \$15,000 to \$24,999
d. \$25,000 to \$34,999
e. \$35,000 to \$49,999
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f. \$50,000 to \$74,999
g. \$75,000 to \$99,999
h. \$100,000 to \$149,999
i. \$150,000 or more
j. Don't know
k. Prefer not to answer
56. Are you currently employed?
a. Yes, full-time
,
b. Yes, part-time
c. No
57. What is your occupation?
[short answer]
58. Do you have a driver's license?
a. Yes
b. No
59. How many years have you held your driver's license?
[short answer] years
60. Have you ever received any traffic citations?
a. No, I haven't got any traffic citations to date.
b. Yes, 1.

c.	Yes, 2.
	Yes, 3-5.
	Yes, 5+.
61. Have y	ou ever witnessed or been involved in any traffic crashes in the past?
a.	No, never.
b.	Yes, 1.
	Yes, 2.
	Yes, 3-5.
	Yes, 5+.
f.	Yes, 10+.
	nany vehicles are available to you at your home? Only count those in working ons that are privately owned or leased by you or your household.
a.	
b.	
c.	
d.	
e.	4
f.	5+
b. c.	Work/school trips Grocery and Shopping trips Personal Business trips Social/Recreational trips i. Walk ii. Bike, scooter, skateboard iii. Personal car (driving yourself) iv. Carpool, taxi, Uber, Lyft, UTA on-demand, etc. v. Public transit (bus, train, light rail)
visiting more that a. b. c. d. e. f. g.	1 2 3 4 5 6-9
n.	10+
	Page Break

[If option	(b) De	cline in	QN.	1]
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Your response has been recorded.

We thank you for your time spent taking this survey. If you have any questions, suggestions, or recommendations regarding this survey, please fill free to send an email at sailesh.acharya@usu.edu.

Survey Ends	