Informed Consent

INDOT SPR 4706 Study

Electric Vehicles: Public Perceptions, expectations, and willingness-to-pay across highway user groups (vehicle classes)

IRB Research Project Number: 2023-158

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What is the purpose of this study?

The purpose of this study is to understand public perceptions and expectations regarding electric vehicles (EVs) and their willingness to pay for different charging options. Specifically, our aim is to collect information about the experience using electric vehicles, knowledge of electric vehicle attributes and incentives, and charging behavior and preferences of Indiana residents. You are being asked to participate in this survey because you are an adult resident of Indiana and your perceptions and opinions regarding electric vehicles and charging infrastructure are valuable.

What will I do if I choose to be in this study?

If you choose to participate in this study, you will be asked to answer questions related to your perceptions about electric vehicles and their attributes, your current travel patterns, charging perceptions and knowledge, and some basic demographic information. Additionally, you will be presented with six hypothetical scenarios and be asked to choose your preferred charging option assuming that you are taking a long distance trip in an EV.

How long will the survey take?

The survey consists of nine sections and it will take approximately 10-15 minutes to complete.

What are the possible risks or discomforts?

The risks of participating are minimal and no greater than those encountered in everyday activities. However, if you have distressing feelings after completing this questionnaire and feel that you may need to talk with someone, you can contact the national crisis hotline at 1-800-273-8255.

Will information about me and my participation be kept confidential?

This study is funded by the Indiana Department of Transportation (INDOT). The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight. Your responses and participation are completely anonymous and any information you provide will be confidential. Only Professor Konstantina Gkritza, Ph.D.; Professor Satish Ukkusuri, Ph.D.; Post-doctoral Research Associate Prasanna Humagain, Ph.D.; and Graduate Research Assistants Bruno Cesar Krause Moras, M.Sc. and Xiaowei Chen will have access to the data, which will be non-identifiable. All data from the surveys will be coded and entered into a computerized data file that will be stored in password-protected folders in computers accessible only to the research study personnel.

What are my rights if I take part in this study?

Your participation in this study is completely voluntary. You may choose not to participate or, if you agree to participate, you can withdraw your participation at any time without penalty or loss of benefits to which you are otherwise entitled.

Are there any potential benefits?
Although you will not directly benefit from this study, your participation in this study will help address critical research questions about electric vehicle perceptions/charging behavior, which will inform and guide the Indiana Department of Transportation about electric vehicle policies. Findings from this study will be published in the form of a technical report and will be accessible to the general public.

Will I receive payment or other incentive?
You will receive compensation from Dynata, a global market research company that administers the survey. Dynata offers great diversity in incentives and could be in any of these three forms: cash, points, or donation to charity. Dynata uses a reasonable level of reward based on the amount of effort required, the population and appropriate regional customs. Regardless of the type of incentive, the value is the same for every respondent in a given study. You will receive no more than a $3.75 value for your participation; actual compensation may be less. Any discrepancies or questions related to expected compensation should be directed to Dynata.

Who can I contact if I have questions about the study?
If you have questions, comments, or concerns about this project, you can talk to one of the researchers. Please contact Konstantina Gkritza, Ph.D. at nadia@purdue.edu, or Satish Ukkusuri, Ph.D. at sukkusur@purdue.edu.

To report via Purdue's Hotline see www.purdue.edu/hotline

If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu), or write to:
Human Research Protection Program - Purdue University

<Ernest C. Young Hall, 10th floor - Room 1032

155 S. Grant Street, West Lafayette, IN 47907-2114

Documentation of Informed Consent I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions have been answered. I am prepared to participate in the research study described above. Please print this Information Sheet for your records. Print Consent Form

Please put your initials here to confirm that you have read the informed consent and agree to participate in this survey.

Section: Screening Questions

What is your age?

- ◯ Under 18
- ◯ 18-24

- ◯ 25-34
- ◯ 35-44
- ◯ 45-54
- ◯ 55-64
- ◯ Over 65

Where do you currently live?

Section: EV knowledge/experience questions

To facilitate reading and answering the questions, from now on, “EV” will refer to the Electric Vehicles that are only powered with a battery pack

Which statement best describes your situation:

- ◯ I currently own an EV
- ◯ I currently lease an EV
- ◯ I owned an EV in the past and now I lease one
- ◯ I leased an EV in the past and now I own one
- ◯ I owned an EV in the past, but I do not have access to an EV anymore
- ◯ I leased an EV in the past, but I do not have access to an EV anymore
- ◯ I have never owned or leased an EV

On a typical day, how far do you use your EV?

- ◯ 0 – 15.0 miles
- ◯ 15.1 – 30.0 miles
- ◯ 30.1 - 50.0 miles
- ◯ 50.1 - 70.0 miles
- ◯ more than 70.0 miles

What is the brand of the EV that you currently have the most access to?

- ○ Audi
- ○ BMW
- ○ Chevrolet
- ○ Hyundai
- ○ Kia
- ○ Nissan
- ○ Rivian
- ○ Tesla
- ○ Toyota
- ○ Volkswagen
- ○ Other

Currently, is the EV your most used vehicle in the household?

- ○ No
- ○ Yes

How is the overall experience with the EV?

- ○ Very Negative
- ○ Negative
- ○ Neutral
- ○ Positive
- ○ Very Positive

How was the overall experience with the EV?

- ○ Very Negative
- ○ Negative
- ○ Neutral
- ○ Positive
- ○ Very Positive

Have you ever driven an EV?

- ○ No
- ○ Yes

How was the driving experience?

- ○ Very negative
- ○ Negative
- ○ Neutral
- ○ Positive
- ○ Very positive

Have you ever taken a ride in an EV?

- ○ No
- ○ Yes
- ○ I don't know / I am not sure

How was the riding experience?

- ○ Very negative
- ○ Negative
- ○ Neutral
- ○ Positive
- ○ Very Positive

Section: Current Travel Patterns

How many EVs are in your household including the EV that you currently have the most access to?

- ○ 0
- ○ 1
- ○ 2

- ○ 3
- ○ 4 or more

How many non-EVs are in your household?

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4 or more

On average, how often do you travel for the activities listed below:

	Daily	Few times a week	Few times a month	Few times a year	Never
Work (or school for students and work-related business)	○	○	○	○	○
Shopping (running errands)	○	○	○	○	○
Personal (church, medical or family business)	○	○	○	○	○
Social (visiting friends/relatives)	○	○	○	○	○
Recreational (leisure, camping, fishing and similar)	○	○	○	○	○

Which of the following is your most frequently used mode of travel for each trip purpose? (Please select only one mode for each trip purpose)

	Walking	Personal Vehicle (Non-EV)	Personal Vehicle (EV)	Public Transit	Ride-hailing (Ex: Uber, Lyft…)	Personal Bike / scooter	N/A (I am not travelling for this purpose)
Work (or school for students and	○	○	○	○	○	○	○

	Walking	Personal Vehicle (Non-EV)	Personal Vehicle (EV)	Public Transit	Ride-hailing (Ex: Uber, Lyft…)	Personal Bike / scooter	N/A (I am not travelling for this purpose)
work-related business)							
Shopping (running errands)	○	○	○	○	○	○	○
Personal (church, medical or family business)	○	○	○	○	○	○	○
Social (visiting friends/relatives)	○	○	○	○	○	○	○
Recreational (leisure, camping, fishing and similar)	○	○	○	○	○	○	○

Which of the following is your most frequently used mode of travel for each trip purpose? (Please select only one mode for each trip purpose)

	Walking	Personal Vehicle (Non-EV)	Public Transit	Ride-hailing (Ex: Uber, Lyft…)	Personal Bike / scooter	N/A (I am not travelling for this purpose)	Other
Work (or school for students and work-related business)	○	○	○	○	○	○	○
Shopping (running errands)	○	○	○	○	○	○	○
Personal (church, medical or family business)	○	○	○	○	○	○	○
Social (visiting friends/relatives)	○	○	○	○	○	○	○

	Walking	Personal Vehicle (Non-EV)	Public Transit	Ride-hailing (Ex: Uber, Lyft…)	Personal Bike / scooter	N/A (I am not travelling for this purpose)	Other
Recreational (leisure, camping, fishing and similar)	○	○	○	○	○	○	○

In an average week, how far do you travel for these specific purposes? (cumulative distance)

	Never/ O miles	0 to 10 miles	11 to 20 miles	21 to 30 miles	31 to 50 miles	51 to 70 miles	71 to 100 miles	101 to 150 miles	More than 150 miles
Work (or school for students and work-related business)	○	○	○	○	○	○	○	○	○
Shopping (running errands)	○	○	○	○	○	○	○	○	○
Personal (church, medical or family business)	○	○	○	○	○	○	○	○	○
Social (visiting friends/relatives)	○	○	○	○	○	○	○	○	○
Recreational (leisure, camping, fishing and similar)	○	○	○	○	○	○	○	○	○

Section: Public Perceptions about EV's questions

EVs and non-EVs have some differences in their characteristics. How much of an advantage (or disadvantage) are the following characteristics of EVs, compared to non-EVs?

attitudinal questions?

	Major Disadvantage	Disadvantage	Neither	Advantage	Major Advantage	Don't know / not sure
EV purchase price:	○	○	○	○	○	○
EV maintenance cost:	○	○	○	○	○	○
EV fuel cost:	○	○	○	○	○	○
EV registration fees	○	○	○	○	○	○
EV life cycle cost:	○	○	○	○	○	○
EV depreciation:	○	○	○	○	○	○
EV refueling convenience	○	○	○	○	○	○
EV trip planning convenience:	○	○	○	○	○	○
EV noise:	○	○	○	○	○	○
EV driving comfort:	○	○	○	○	○	○
EV driving range	○	○	○	○	○	○
EV reliability:	○	○	○	○	○	○
EV safety:	○	○	○	○	○	○

Please rate your level of agreement with following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Being environmentally responsible is an important part of who I am	○	○	○	○	○

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I am the type of person to worry about being green	○	○	○	○	○
Reducing my car's environmental impact would make me feel good	○	○	○	○	○
Environmental issues are an important factor when deciding to purchase a vehicle	○	○	○	○	○

How likely are you to buy a new or used EV today or in the near future?

- ○ I am more likely to buy new EV
- ○ I am more likely to buy used EV

What are the **major** factors for your preference for a new EV? (multiple options can be selected)

- ☐ I prefer to buy new vehicles independently of the type;
- ☐ I think the purchase prices of new and old EVs are similar, so I prefer to buy a new one
- ☐ I don’t trust the reliability of used EVs
- ☐ New EVs have better financial incentives than the used ones
- ☐ The new EV would have better performance (acceleration, driving range…) than the used one
- ☐ Other: _____

What are the **major** factors for your preference for a used EV? (multiple options can be selected)

- ☐ I am just able to afford a used EV
- ☐ The cost-benefit of used EVs is much better than the new ones

- [ ] The depreciation price of the used vehicles is smaller than the new ones
- [ ] I am not aware of incentives/policies for purchasing new EV
- [ ] The EV would not be the most used vehicle in my household, so I would prefer to buy a cheaper one
- [ ] I am not sure if I will get used to an EV, so I prefer to not invest so much in one
- [ ] Other: _____

Please, for this question select "1":

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4

Section: EV incentives/barriers questions

EV buyers may (or may not) be eligible for different incentives. Which of the following incentives for EV users are you familiar with? (multiple options can be selected)

- [ ] EV Federal Tax Credit
- [ ] Installing home charging rebates
- [ ] Special rates to home charging in off-peak hours
- [ ] Other _____
- [ ] I have never heard of any incentives related to EV users

Information: EV users are able to have different incentives, such as:
EV Federal Tax Credit: Buyers of new EVs may be eligible for a tax credit of up to $7,500.00 and buyers of used EVs may be qualified for up to $4,000.00 in tax breaks;
Installing home charging rebates: some utility companies offer rebates to customers who install specific types of charging stations at home;
Special rates for home charging in off-peak hours: some utilities offer

special rates to customers who charge their EVs during off-peak hours;

Considering the provided information, please rate your level of agreement with the following statement:
“Knowing that EV users can be eligible for these incentives makes me willing to buy/lease an EV”

- ○ Strongly disagree
- ○ Disagree
- ○ Neither agree nor disagree
- ○ Agree
- ○ Strongly agree

What are the main reasons why you do not own/lease an EV anymore? (multiple options can be selected)

- ☐ Inconvenience to plan long trips
- ☐ Inconvenience to charge
- ☐ I don't have access to home charging
- ☐ It's difficult to find reliable charging stations nearby
- ☐ The purchase price was too high
- ☐ The maintenance costs were too high
- ☐ The vehicle was unreliable
- ☐ I decided not to have any cars in general
- ☐ Other

What are the main reasons why you have never owned/leased an EV? (multiple options can be selected)

- ☐ Inconvenience to plan long trips
- ☐ Inconvenience to charge
- ☐ I don't have access to home charging

- [ ] It's difficult to find reliable charging stations nearby
- [ ] The purchase price is too high
- [ ] The maintenance costs are too high
- [ ] The vehicle is unreliable
- [ ] I decided not to have any cars in general
- [ ] Other

Section: EV Adoption curves

If you were to buy or lease a vehicle today, which statement best describes your thoughts about an EV?

	Very Unlikely	Unlikely	Neutral	Likely	Very likely
I would buy an EV	○	○	○	○	○
I would lease an EV	○	○	○	○	○
I would seriously consider buying an EV	○	○	○	○	○
I would seriously consider leasing an EV	○	○	○	○	○
I might consider getting an electric-only vehicle in the future, but not If I were to buy or lease a vehicle today	○	○	○	○	○
I would definitely not consider getting an EV	○	○	○	○	○

How likely are you to purchase an EV within the next:

	Extremely unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Extremely likely	I don't plan to purchase a vehicle in this period, independently of the type
1 year	○	○	○	○	○	○
2 years	○	○	○	○	○	○
3 years	○	○	○	○	○	○
5 years	○	○	○	○	○	○
8 years	○	○	○	○	○	○

How likely are you to lease an EV within the next:

	Extremely unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Extremely likely	I don't plan to lease a vehicle in this period, independently of the type
1 year	○	○	○	○	○	○
2 years	○	○	○	○	○	○
3 years	○	○	○	○	○	○
5 years	○	○	○	○	○	○
8 years	○	○	○	○	○	○

Section: Charging knowledge/experience questions

Which of the following charging technologies have you heard/read about? (multiple options can be selected)

- ☐ Alternating Current (AC): Level 1 - Slow charger
- ☐ Alternating Current (AC): Level 2 - Slow charger
- ☐ Direct Current Fast Charging (DCFC): Level 3 - Fast charger
- ☐ Dynamic Wireless Power Transfer: DWPT (i.e., EVs can recharge while driving on designated lanes)
- ☐ Battery swapping
- ☐ None of the above

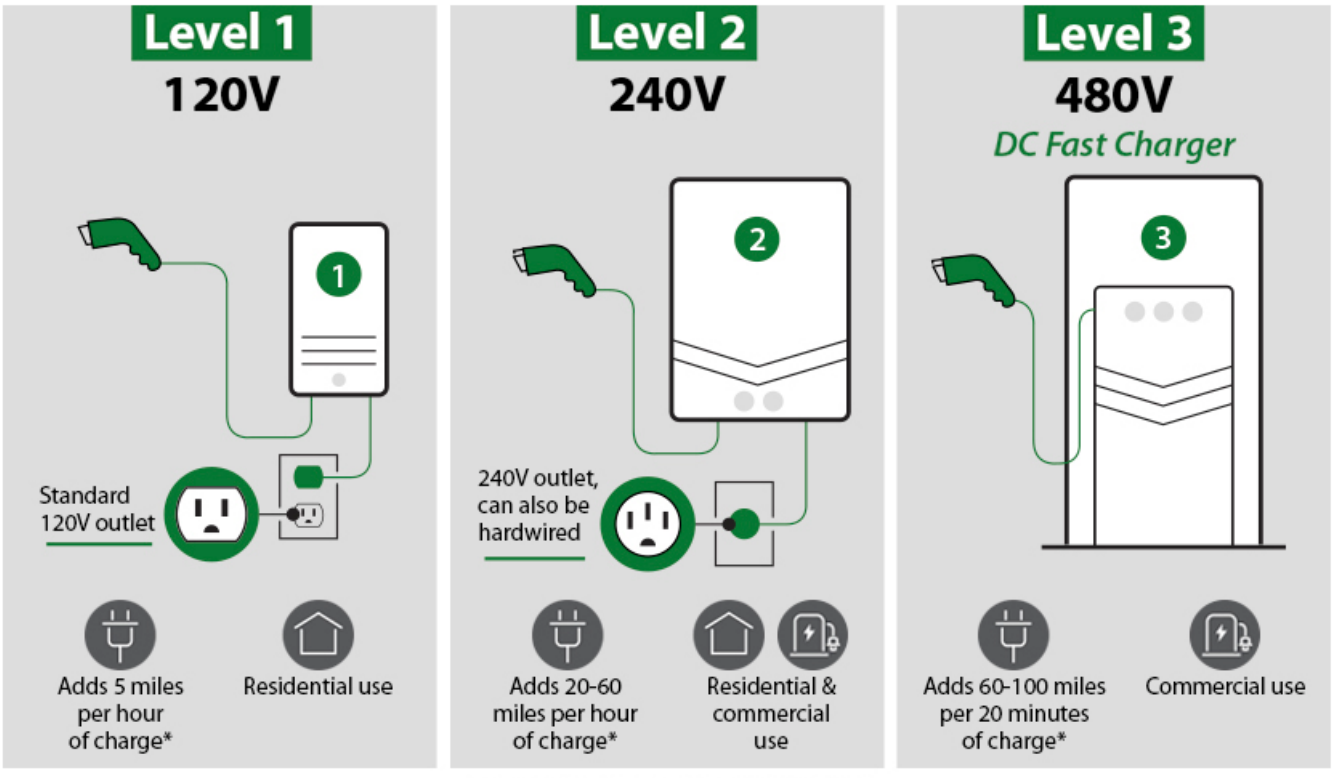
Do you have a charging station at your home?

- ◯ No
- ◯ Yes

Where do you charge your EV? (multiple options can be selected)

- ☐ Home charging stations (Level 1)
- ☐ Public charging stations (Level 2)
- ☐ Public charging stations (DCFC)

If you were an EV user, where would you charge your EV? (multiple options can be selected)



- ☐ Home charging stations (Level 1)
- ☐ Public charging stations (Level 2)
- ☐ Public charging stations (DCFC)

What would be the maximum distance would you be willing to drive to charge your EV?

- ○ 0 miles (home charging)
- ○ 0.1 - 2 miles
- ○ 2.1 - 5 miles
- ○ 5.1 - 10 miles
- ○ more than 10 miles

If public charging is available at the following places, how much will you use them to charge your EV?

	Never	Rarely	Sometimes	Often	Always
Office	○	○	○	○	○
Retail	○	○	○	○	○
Public Administration (e.g.: town hall, court)	○	○	○	○	○
Medical	○	○	○	○	○
Educational	○	○	○	○	○
Leisure	○	○	○	○	○
Transit	○	○	○	○	○
Hotel	○	○	○	○	○
Restaurant	○	○	○	○	○

When you leave home with your EV for the first time in the day, what is your typical battery level?

- ○ 0% - 49.9%
- ○ 50.0% - 69.9%
- ○ 70.0% - 89.9%
- ○ 90.0% - 100.0%

At what battery level do you typically charge your EV?

- ○ 0% - 19.9%
- ○ 20.0% - 39.9%

- ○ 40.0% - 59.9%
- ○ 60.0% - 100.0%

At what time of the day do you usually charge your EV? (multiple options can be selected)

- ☐ From 7:01AM to 9:00 AM
- ☐ From 9:01AM to 12:00 PM
- ☐ From 12:01PM to 5:00 PM
- ☐ From 5:00 PM to 9:00 PM
- ☐ From 9:01PM to 7:00 AM

How long do you typically charge the EV in a day that you most have access to?

	0 – 14.9 minutes	15.0 – 29.9 minutes	30.0 – 59.9 minutes	1h – 3 hours	More than 3 hours	I don't charge here	I don't know
Home charging stations	○	○	○	○	○	○	○
Public charging stations (Level 2)	○	○	○	○	○	○	○
Public charging stations (DCFC)	○	○	○	○	○	○	○

How long are you willing to walk from the nearby public charging stations/parking lots to your destination?

- ○ 0 - 3 minutes
- ○ 3 - 7 minutes
- ○ 7 - 10 minutes
- ○ More than 10 minutes

Rate your behavior in the following situation:
"If the EV's range is almost as same as the distance of my next trip, I will start the trip".

- ◯ Never
- ◯ Sometimes
- ◯ About half the time
- ◯ Most of the time
- ◯ Always

Rate your behavior in the following situation:
"If a trip is not familiar to me, I will keep the battery level higher than usual if possible before departing".

- ◯ Never
- ◯ Sometimes
- ◯ About half the time
- ◯ Most of the time
- ◯ Always

Answer this question by imagining that you are an EV-user: How long are you willing to walk from the nearby public charging stations/parking lots to your destination?

- ◯ 0 - 3 minutes
- ◯ 3 - 7 minutes
- ◯ 7 - 10 minutes
- ◯ More than 10 minutes

Rate your behavior by imagining that you are an EV user:
"If the EV's range is almost as same as the distance of my next trip, I will start the trip".

- ◯ Never
- ◯ Sometimes
- ◯ About half the time
- ◯ Most of the time

- ◯ Always

Rate your behavior by imagining that you are an EV user:
"If a trip is not familiar to me, I will keep the battery level higher than usual if possible before departing".

- ◯ Never
- ◯ Sometimes
- ◯ About half the time
- ◯ Most of the time
- ◯ Always

Please, for this question select "Disagree":

- ◯ Strongly agree
- ◯ Agree
- ◯ Neutral
- ◯ Disagree
- ◯ Strongly disagree

Section: Charging Perceptions questions

Do you feel certain about being able to charge your vehicle when you need to?

- ◯ Never
- ◯ Sometimes
- ◯ About half of time
- ◯ Most of the time
- ◯ Always

If you were using an EV, would you feel certain about being able to charge your vehicle when you need to?

- ◯ Never

- ○ Sometimes
- ○ About half of time
- ○ Most of the time
- ○ Always

Public charging stations will be built all over the state in the next few years. What would be the minimum distance (in miles) between charging stations under which you would not be concerned about the driving range?

- ○ 10 miles
- ○ 30 miles
- ○ 50 miles
- ○ 100 miles
- ○ More than 100 miles

Below are few statements about accessibility to EV charging. Please rate to what extent you agree or disagree with these statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Charging at public charging stations is cumbersome	○	○	○	○	○
I do not have the patience to wait for the car to charge	○	○	○	○	○
There are few charging stations near my home/workplace	○	○	○	○	○
Charging stations are hard to find	○	○	○	○	○
I expect that there will be more public charging facilities in the next five years	○	○	○	○	○

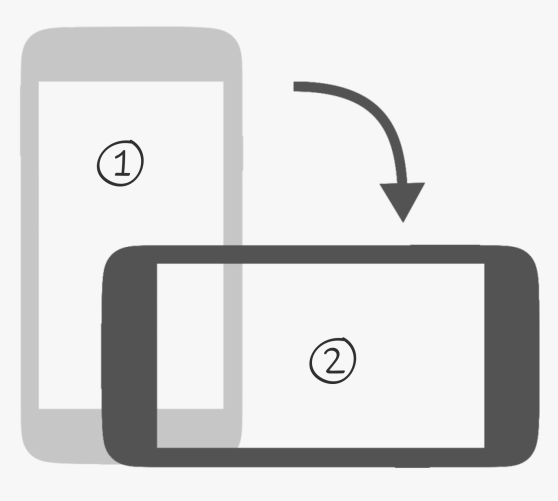
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
There are too many charging stations not working or with serious failures	○	○	○	○	○

Verification question: nowadays, how many non-EVs are in your household?

- ○ 4 or more
- ○ 3
- ○ 2
- ○ 1
- ○ 0

Section G: Experimental Design - WTP questions

If you are using mobile, please change your view to landscape to answer the next questions.



In the following section, you will be provided with 6 different scenarios for charging your EV during a long distance trip.

For these questions (even if you own an electric vehicle), assume that you are driving an EV with a range of 200 miles and a battery capacity of 60 kWh. It means that this EV can travel 200 miles when the battery is at

100% charge. The destination is 100 miles from your house with a speed limit of 70 mi/hr.

Then, you can choose to use any chargers to reach your destination. Each charging station has varying travel time, travel cost, charging time, waiting time, and presence of other services such as restrooms or other amenities. There are no right or wrong answers, as we only want to learn about your preferences.

a. Travel time (without charging): The time required to travel 100 miles at the speed 70 mi/hour without charging

b. Charging time: Time required to charge the vehicle. For DCFC, assume that you are charging your EV to full

c. Access time: Time required to reach the charging station from your original route.

d. Waiting time (in the queue) : Time spent waiting your turn in the queue

e. Total Travel Time: a+b+c+d

f. Cost per trip: Total cost of charging per trip (based on kWh)

Note that DWPT stands for Dynamic Wireless Power Transfer. Dynamic wireless power transfer (DWPT) technology enables Electric Vehicles (EVs) to be charged as they are driven at highway speeds.

From the options below, please choose a charging station where you would charge your EV.

Long_Distance (Block 1)

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 80% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

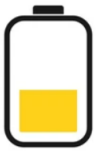
Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	3	11	22
Charging time (mins)	60	10	N/A
Access time (mins)	3	15	N/A
Waiting time (mins)	6	5	N/A
Total travel time (mins)	154 (2hr34mins)	115 (1hr55mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✘	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	5	8	16
Charging time (mins)	120	4	N/A
Access time (mins)	9	5	N/A
Waiting time (mins)	3	15	N/A
Total travel time (mins)	217 (3hr37mins)	109 (1hr49mins)	85 (1hr25mins)
Restroom	✓	✗	N/A
Restaurant, Retail and Shopping	✓	✗	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	21	35
Charging time (mins)	240	14	N/A
Access time (mins)	3	15	N/A
Waiting time (mins)	6	5	N/A

Total travel time (mins)	334 (5hr34mins)	119 (1hr59mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✓	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 80% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

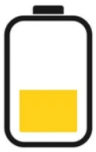
Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	3	11	22
Charging time (mins)	60	10	N/A
Access time (mins)	3	15	N/A
Waiting time (mins)	6	5	N/A
Total travel time (mins)	154 (2hr34mins)	115 (1hr55mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✘	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	4	8	16
Charging time (mins)	90	4	
Access time (mins)	6	10	
Waiting time (mins)	6	5	
Total travel time (mins)	187 (3hr7mins)	104 (1hr44mins)	85 (1hr25mins)
Restrooms	✓	✓	
Restaurant, Retail and Shopping	✗	✓	

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 80% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your

turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	3	11	16
Charging time (mins)	60	10	
Access time to charging station (mins)	6	10	
Waiting time (mins)	0	30	
Total travel time (mins)	151 (2hr31mins)	135 (2hr15mins)	85 (1hr25mins)
Restrooms	✘	✓	
Restaurant, Retail and Shopping	✘	✓	

Level 2 ○ DCFC ○ DWPT ○

Long_Distance (Block_2)

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

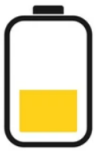
Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	27	35
Charging time (mins)	240	24	N/A
Access time (mins)	9	5	N/A
Waiting time (mins)	0	30	N/A
Total travel time (mins)	334 (5hr34mins)	144 (2hr24mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✘	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	4	8	22
Charging time (mins)	90	4	N/A
Access time to charging station (mins)	3	15	N/A
Waiting time in queue (mins)	0	30	N/A

Total travel time (mins)	178 (2hr58mins)	134 (2hr14mins)	85 (1hr25mins)
Availability of Restrooms	✖	✓	N/A
Other Amenities (Restaurant, Retail and Shopping)	✖	✓	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	27	35
Charging time (mins)	240	24	N/A
Access time (mins)	6	10	N/A
Waiting time (mins)	6	5	N/A
Total travel time (mins)	337 (5hr37mins)	124 (2hr4mins)	85 (1hr25mins)
Restrooms	✓	✖	N/A
Restaurant, Retail and Shopping	✓	✖	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	21	28
Charging time (mins)	240	14	N/A
Access time (mins)	3	15	N/A
Waiting time (mins)	0	30	N/A
Total travel time (mins)	328 (5hr28mins)	144 (2hr24mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✓	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

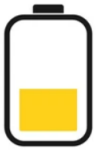
Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	21	40
Charging time (mins)	240	14	N/A
Access time (mins)	6	10	N/A
Waiting time (mins)	3	15	N/A
Total travel time (mins)	334 (5hr34mins)	124 (2hr24mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✘	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

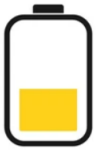
Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	5	8	22
Charging time (mins)	120	6	N/A
Access time (mins)	6	10	N/A
Waiting time (mins)	3	15	N/A
Total travel time (mins)	214 (3hr24mins)	116 (1hr56mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✗	N/A

Level 2 ○ DCFC ○ DWPT ○

Long_Distance(Block_3)

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

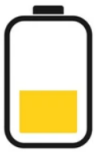
Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	4	8	16
Charging time (mins)	90	6	N/A

Access time (mins)	9	5	N/A
Waiting time (mins)	3	15	N/A
Total travel time (mins)	187 (3hr7mins)	111 (1hr51mins)	85 (1hr25mins)
Restrooms	✘	✓	N/A
Restaurant, Retail and Shopping	✘	✓	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	4	11	19
Charging time (mins)	90	10	N/A
Access time to charging station (mins)	3	15	N/A
Waiting time in queue (mins)	0	30	N/A
Total travel time (mins)	178 (2hr58mins)	140 (2hr20mins)	85 (1hr25mins)
Availability of Restrooms	✓	✘	N/A

Other Amenities (Restaurant, Retail and Shopping)	✓	✗	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	27	40
Charging time (mins)	240	14	N/A
Access time (mins)	9	5	N/A
Waiting time (mins)	3	15	N/A
Total travel time (mins)	337 (5hr37mins)	119 (1hr59mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✓	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV. N/A

	Level 2	DCFC	DWPT
Cost per trip ($)	15	21	40
Charging time (mins)	240	24	
Access time (mins)	6	10	
Waiting time (mins)	0	30	
Total travel time (mins)	331 (5hr31mins)	149 (2hr29mins)	85 (1hr25mins)
Restrooms	✓	✘	
Restaurant, Retail and Shopping	✓	✘	

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as

other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	21	28
Charging time (mins)	240	24	N/A
Access time (mins)	9	5	N/A
Waiting time (mins)	3	15	N/A
Total travel time (mins)	337 (5hr37mins)	129 (2hr9mins)	85 (1hr25mins)
Restrooms	✓	✗	N/A
Restaurant, Retail and Shopping	✓	✗	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	27	35
Charging time (mins)	240	14	N/A
Access time (mins)	6	10	N/A

Waiting time (mins)	3	15	N/A
Total travel time (mins)	334 (5hr34mins)	124 (2hr4mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✘	N/A

Level 2 ○ DCFC ○ DWPT ○

Long_Distance(Block_4)

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 80% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

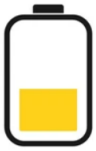
Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	3	8	19
Charging time (mins)	60	6	N/A
Access time (mins)	6	10	N/A
Waiting time (mins)	6	5	N/A
Total travel time (mins)	157 (2hr37mins)	106 (1hr46mins)	85 (1hr25mins)
Restrooms	✘	✓	N/A
Restaurant, Retail and Shopping	✘	✘	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	4	8	16
Charging time (mins)	90	6	N/A
Access time (mins)	9	5	N/A
Waiting time (mins)	0	30	N/A
Total travel time (mins)	184 (3hr3mins)	126 (2hr6mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✗	✓	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	5	11	19
Charging time (mins)	120	10	N/A
Access time to charging station (mins)	3	15	N/A
Waiting time in queue (mins)	0	30	N/A
Total travel time (mins)	208 (3hr28mins)	140 (2hr20mins)	85 (1hr25mins)
Availability of Restrooms	✓	✗	N/A
Other Amenities (Restaurant, Retail and shopping)	✓	✗	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 30% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge

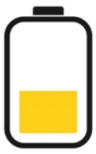
your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	15	27	28
Charging time (mins)	240	14	N/A
Access time (mins)	3	15	N/A
Waiting time (mins)	6	5	N/A
Total travel time (mins)	334 (5hr34mins)	119 (1hr59mins)	85 (1hr25mins)
Restrooms	ü	Yes	N/A
Restaurant, Retail and shopping	Yes	Yes	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 50% charge at the origin.



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Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT

Cost per trip ($)	5	8	19
Charging time (mins)	120	6	N/A
Access time (mins)	9	5	N/A
Waiting time (mins)	6	5	N/A
Total travel time (mins)	220 (3hr40mins)	101 (1hr41mins)	85 (1hr25mins)
Restrooms	✓	✓	N/A
Restaurant, Retail and Shopping	✓	✘	N/A

Level 2 ○ DCFC ○ DWPT ○

Assume that the you start the 100 mile journey in your EV (with range of 200 miles) with 80% charge at the origin.

Below are three charging stations you can use to charge your vehicle.

Each charging station has varying travel cost, charging time (time to charge your EV), access time (time to reach the charging station from highway), and waiting time (time waiting for your turn to charge your EV), as well as other amenities (restrooms and restaurant, retail and shopping).

Please choose the charging station where you would charge your EV.

	Level 2	DCFC	DWPT
Cost per trip ($)	3	8	19
Charging time (mins)	60	4	N/A
Access time (mins)	3	15	N/A
Waiting time (mins)	6	5	N/A
Total travel time (mins)	154 (2hr34mins)	109 (1hr49mins)	85 (1hr25mins)

Restrooms	✓	✖	N/A
Restaurant, Retail and Shopping	✖	✖	N/A

Level 2 ○ DCFC ○ DWPT ○

Section Z: Socio-Demographic Questions

What gender do you identify with?

- ○ Male
- ○ Female
- ○ Non-binary / third gender
- ○ Other
- ○ Prefer not to say

Which races do you identify with? (multiple options can be selected)

- ☐ White
- ☐ Black/African American
- ☐ Asian/Pacific Islander
- ☐ Native American/Alaskan Native
- ☐ Other
- ☐ Prefer not to say

Which ethnicity do you identify with?

- ○ Hispanic
- ○ Non-hispanic
- ○ Prefer not to say

What is your highest level of education?

- ○ Grade school or less

- ◯ Some high school
- ◯ High school graduate
- ◯ Technical training beyond high school
- ◯ Some college
- ◯ College graduate
- ◯ Graduate or professional school

What is your main occupation?

- ◯ Employed full-time
- ◯ Employed part-time
- ◯ Unemployed and looking for work
- ◯ Unemployed and not looking for work
- ◯ Retired
- ◯ Student
- ◯ Disabled

What is your approximate annual household income before taxes?

- ◯ Under $25,000
- ◯ $25,000 - $49,999
- ◯ $50,000 - $74,999
- ◯ $75,000 - $99,999
- ◯ $100,000 - $149,999
- ◯ $150,000 or more
- ◯ I prefer not to say

How many people are in your household (including you)?

- ◯ 0
- ◯ 1
- ◯ 2
- ◯ 3

- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8 or more

What kind of residence do you live in?

- ○ Single family home
- ○ Apartment complex
- ○ Condo
- ○ Duplex
- ○ Townhome
- ○ Other

Do you plan to move to a different type of residence in the next 3 years?

- ○ Definitely not
- ○ Probably not
- ○ Might or might not
- ○ Probably yes
- ○ Definitely yes

What is your home ZIP code?

What is the ZIP code of your main activity outside the home (like work, study, health)?

For how many years have you lived in Indiana?

- ○ 0 to 2 years

- ◯ 2 to 5 years
- ◯ 5 to 10 years
- ◯ more than 10 years

Generally speaking, do you usually think of yourself as a Democrat, a Republican, an independent, or a member of another party?

- ◯ Democrat
- ◯ Republican
- ◯ Independent
- ◯ Other

Do you think of yourself as closer to the Democratic Party or to the Republican Party?

- ◯ Closer to Democrat
- ◯ Closer to Republican
- ◯ Neither

Politically, where would you place yourself on this scale?

- ◯ Extremely liberal
- ◯ Liberal
- ◯ Slightly liberal
- ◯ Moderate
- ◯ Slightly conservative
- ◯ Conservative
- ◯ Extremely conservative

Final Section

Please, use the space below to provide any other comments related to EVs that you think are relevant: