Public Perceptions of Transportation Fees, Taxes and Electric Vehicles in North Carolina Additional Questions

- What metrics were used to compare funding mechanisms?
  - The study assessed public preferences for funding mechanisms using *split-ballot survey experiments*, comparing support levels for various options such as a mileage-based user fee (MBUF), increased gas tax, increased state sales tax, and increased vehicle registration fee. Metrics included stated preferences under general, specific, and informational conditions, and subgroup analyses by age, income, political affiliation, and urban/rural location.

- What statistical methods validated the survey results?
  - The research team utilized descriptive statistics methods to analyze patterns in public opinion and subgroup variation. Split-ballot designs helped test the consistency of preferences across different question framings. Longitudinal comparisons with past survey waves further supported the reliability of findings over time.

- Did the study consider EV infrastructure limitations?
  - Yes. Infrastructure concerns were prominent. Only 33% of respondents felt confident that the U.S. would build adequate EV charging infrastructure. Focus group participants highlighted insufficient charging stations, especially in rural areas, as a barrier to EV adoption.

- How did responses vary by urban vs. rural demographics?
  - Urban respondents were more supportive of funding for alternative modes (e.g., biking, transit) and more confident in EV infrastructure. Rural respondents expressed skepticism about EV readiness and were more concerned with the impact of MBUF policies on those who drive longer distances.

- What was the sample size and response rate?
  - The final sample size was 3,016 respondents. The response rate is not explicitly reported, but respondents were recruited through vetted online panels and incentives were used to boost participation.

- How was bias minimized in the longitudinal surveys?
    - Bias was minimized through thoroughly examining the survey instrument to ensure language was simple, neutral, and contained balanced response options. Furthermore, the use of split-ballot experiments minimizes priming or framing effects. Additionally, the survey was distributed through survey panels that utilize multiple distribution methods.

- How was public support for different fee models measured?
    - Support was gauged across split ballots for general preference and specific monetary amounts.

- What tools were used for data visualization? Were focus groups coded using qualitative software?
    - The focus of this research was not data visualization; graphics for the report were created in Excel.

- Was weighting applied to ensure representativeness?
    - Weighting was not applied to the sample; demographic targets were utilized to ensure quotas were met to be representative of North Carolina's adult population.

- What role did income level play in responses?
    - Income influenced EV perceptions, with higher-income respondents more likely to view EVs positively and consider purchasing them. Additionally, lower-income respondents were more likely to overestimate the gas tax.

- How does the study inform NCDOT's funding strategy?
    - Findings show support for alternative revenue mechanisms like MBUF and increased sales tax, helping NCDOT align policy proposals with public preference.

- Were policy simulations included in the analysis?
    - No. Policy simulations were not in the scope of research.

- How were equity concerns in fee structures addressed?
    - Equity was discussed both in survey questions and focus groups. The implementation of a mileage based usage fee raised concerns for rural drivers. Additionally, sales tax increases drew criticism for disproportionately affecting lower-income residents.

- Did the study compare North Carolina to other states?
  - The research team reviewed the policies of other states to best understand how funding reforms are enacted.

- Did social media sentiment analysis factor in?
  - No. Social media was not utilized in the project. The research relied solely on survey and focus group methodologies.

- Was visual literacy considered in data presentation?
  - The report includes simple and clearly labeled data in straight forward graphs.