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Washington-Baltimore
Regional Air Passenger Survey (APS)
Response Rate and Quality Study

Aviation Technical Subcommittee Meeting
May 27, 2021

ICF Study Team

- **Heather Driscoll, MS – Survey Director:** 20 years of experience in survey methodology and management; Manages large and complex surveys across a variety of content areas, including transportation.

- **Olivia Saucier, MS, PMP – Survey Manager:** Managed over 40 survey projects with complex fielding timelines, including transportation surveys; Experience as qualitative lead and report manager.

- **Zoe Padgett, MS – Survey Methodologist:** 5 years of experience working on large-scale federal surveys, primarily in education; Expertise in survey design and questionnaire development; Masters degree in Survey Methodology from the University of Maryland

Tasks

- **Task 1**: Technical Advisory Committee (TAC) Meetings

- **Task 2.1a**: Interviews with 6 key informants
- **Task 2.1b**: A literature review of APS methodologies
- **Task 2.2**: A review of "big data" sources
- **Task 2.3**: Review the results of the TPB's longitudinal analysis

- **Task 3**. Airport Site Visits

Recommendations – Highlights

- **1.2:** Conduct experiments on all new methods

- **2.1:** Transition to electronic data collection

- **2.3:** Offer incentives to participants

- **4.2:** Reduce item nonresponse by addressing perceived invasiveness of origin and trip questions

- **6.1:** Include airport employees in the survey

1.2: Conduct experiments on all new methods

- Allows for analysis of how changes in methodology can impact trend data.

- Provides a chance to test out the logistics of new procedures before implementing them in the full-scale collection.

- Tests the effects of any changes on data quality and response rates.

- Will entail additional costs.

- May slow down the adoption of new design features because these must be tested and assessed before transitioning to "full-scale" data collection.

2.1: Transition to electronic data collection

- Better data quality due to skip logic which only shows questions that apply to the respondent
  - Easier to include additional questions and complex skips

- Reduced errors in data processing, particularly in interpreting handwriting

- Potential lower costs because of savings on printing and data processing

- Simpler multilingual administration

2.3: Offer incentives to participants

- Incentives have been shown to increase participation and motivate people who would otherwise not be interested in participating

- Many kinds of survey incentives exist
  - A raffle approach may be more practical for the airport context

- Based on the length of the survey, TPB may want to offer a larger raffle incentive of up $500

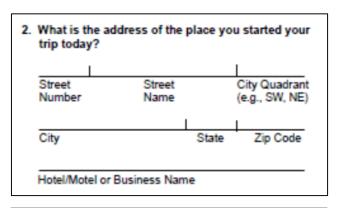- TPB could experiment with different levels of incentives to determine the point of diminishing returns
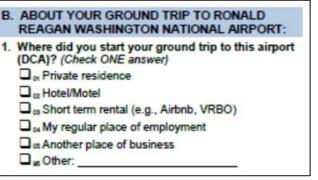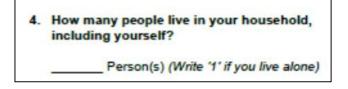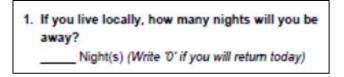
4.2: Perceived invasiveness of questions

- The current survey asks:
  - Origin address
  - Whether origin is a private residence
  - Whether respondent lives alone
  - How long the home will be empty (length of trip)

- Survey protocol says little about privacy and data security

- Redesign the instrument to minimize perceived invasiveness, including removing questions or changing the type of response required

- Redesign data collector materials to address privacy

6.1: Include airport employees in the survey

- Employee commuting patterns are different than air passenger travel choices

- Including employees in ground access studies will improve representation and accuracy of the resulting data

- Including employees in the APS aligns the project with COG's intentional focus on social and racial equity

- TAC members indicated that the easiest way to reach employees would be through their employers.
  - Employers at the airport can be reached through tenant group meetings, which are held monthly.
  - TPB could coordinate with employers to send a survey link to all staff via email.

Thank you!