

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY



Metropolitan Washington
Council of Governments

**REQUEST FOR PROPOSAL (RFP) NO. 25-009
REGIONAL HOUSEHOLD TRAVEL SURVEY**

Proposers shall submit an **ELECTRONIC COPY** of their proposal to the COG LOCKBOX system, as per the submission instructions in Section X of this RFP.

RELEASED DATE: 5/23/25

Submission Due Date: June 20, 2025 **2:00 PM ET**

Questions regarding the RFP shall be submitted as directed in Section VII.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

CONTENTS

I. SUMMARY	3
II. INTRODUCTION	3
III. DEFINITIONS	7
IV. STATEMENT OF WORK	8
V. PERIOD OF PERFORMANCE	20
VI. PRICES/BILLING	20
VII. QUESTIONS CONCERNING THIS RFP.....	21
VIII. DISADVANTAGED BUSINESS ENTERPRISE (DBE).....	21
IX. EVALUATION AND SCORING CRITERIA	22
X. PROPOSAL INSTRUCTIONS	23
XI. PROPOSAL FORM.....	23
ATTACHMENT A: COG STANDARD TERMS AND CONDITIONS	32
ATTACHMENT B: PROPOSERS EXPERIENCE/REFERENCES.....	42
ATTACHMENT C: NON-COLLUSION AFFIDAVIT	43
ATTACHMENT D: DBE PLAN SUBMISSION.....	44
ATTACHMENT E: COOPERATIVE PURCHASING PROGRAM RIDER CLAUSE	47

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

I. SUMMARY

Services requested	Consultant will conduct a regional household travel survey to obtain detailed information about the socio-economic characteristics and travel behavior of persons living in the metropolitan Washington region.
Contract type	Time and materials
Number of contracts	Single award
Duration of contract	One (1) year with extension if schedule requires
Payment method	Net 30
Planned duration of RFP advertisement	Approximately 4 weeks
Start of advertisement period for RFP	May 20, 2025
Deadline for questions about RFP	10 business days before deadline
Deadline for COG responses to questions	5 business days before deadline
Deadline for proposals	June 20, 2025

II. INTRODUCTION

- A. **BACKGROUND** The Metropolitan Washington Council of Governments (COG) is an independent, non-profit association that serves as the principal regional organization of the Washington area's major local governments and their governing officials. Membership includes 300 elected officials from 24 local governments, plus area members of the Maryland and Virginia legislatures and the U.S. Congress. The National Capital Region Transportation Planning Board (TPB) is the federally designated Metropolitan Planning Organization (MPO) for the Washington area. The TPB plays an important role as the regional forum for transportation planning. More specifically, it prepares plans and programs that the federal government must approve for federal-aid transportation funds to flow to the region. The TPB includes representatives from local jurisdictions that are members of COG, plus the state legislatures, the three state departments of transportation, the Metropolitan Washington Airports Authority, the Washington Metropolitan Area Transit Authority and five federal agencies.
- B. COG provides a focus for action on issues of regional concern such as comprehensive transportation planning, air and water quality management, environmental monitoring, tracking economic development and population growth and their effects on the region, coordinating public safety programs, and promoting childcare and housing for the region. COG is supported by financial contributions from its participating local governments, federal and state government grants and contracts, and through grants and contracts from foundations and the private sector.
- C. **PROJECT OVERVIEW** TPB has conducted a regional household travel survey approximately every ten years since 1968. The survey, which collects demographic and travel information from a randomly selected representative sample of households in the TPB region and adjacent areas, is the primary source of observed data used to estimate,

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

calibrate, and validate the regional travel demand model. The model in turn is used for the travel forecasting and air quality conformity analysis of the region's long-range transportation plan as well as to support other key program activities. The survey data are also used by TPB staff to analyze regional travel trends, and by TPB member jurisdictions and agencies to inform regional and sub-regional transportation studies and to conduct their own analyses for their areas of interest. The purpose of the survey is to better understand the characteristics of the households and persons in the region and to better understand daily travel and activities: why we travel, where we go, how we travel, how long it takes us, and what we do when we arrive. The survey seeks to obtain a complete picture of travel patterns in the region. As a result, the regional household travel survey is a critical and essential element of the TPB work program.

The 2017/2018 COG/TPB Regional Travel Survey (RTS) was the most recent large-scale regional household travel survey conducted by the TPB, which surveyed approximately 16,000 households in the TPB modeled area from October 2017 through December 2018. While the RTS provided the most comprehensive picture of travel in the greater Washington region for the 2017-2018 timeframe, it was conducted right before the COVID-19 pandemic which had a dramatic impact on travel in the region. As we emerge from the pandemic, it is expected that travel in the region will continue to evolve as we enter a "new normal" phase. Furthermore, conducting surveys has become more expensive while survey participation rates have been declining, which prompted TPB to modify its approach for conducting future household travel surveys.

The 2025/2026 COG/TPB Regional Travel Survey (RTS) will be the first household travel survey conducted in the post-pandemic era that aims to be state of the practice and embrace the latest survey methods and data collection technology, such as using smartphone apps and utilizing passive data collection. Most importantly, the TPB plans to move towards a once every three-to-five-year cadence for conducting household travel surveys with sample sizes smaller than the previous once-a-decade approach, but still large enough to yield statistically valid and representative results that will capture multimodal trips, which helps better capture the temporal changes of travel patterns, especially those associated with emerging transportation technologies. Following the approach of previous TPB household travel surveys, the 2025/2026 RTS will be a cross-sectional survey. The TPB will also allow for the ability to oversample and supplement the randomly selected, probability-based sample with a non-probability sample to improve response from hard-to-reach populations. Finally, TPB plans to provide flexibility for local jurisdictions within the TPB Planning Area to acquire additional add-on samples by utilizing a rider contract.

- D. **PURPOSE** The purpose of this scope of work is to identify the requirements and corresponding tasks for conducting the 2025/2026 COG/TPB Regional Travel Survey (RTS). Data collection shall begin in the fall of 2025 and conclude in 2026. The minimum length of survey participation shall be at least one 24-hour non-holiday weekday while public schools are in session. The data should also incorporate smartphone samples, although household members should have the option of choosing other data collection methods including the web and phone using computer-assisted telephone interviews (CATI).

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

The period of performance is set for date of award through June 30, 2026, and will encompass the following key objectives:

1. Solicit proposals from qualified survey consultants to obtain full participation of a **minimum of 8,000 households** obtained from address-based sampling using a robust and statistically valid and representative sample across the TPB Modeled Area (see Figure 1) and **up to 2,000 households** obtained from probability and non-probability oversampling of harder to reach households within the TPB Planning Area (see Figure 2).
2. Ensure that the survey will be based on methodological rigor that incorporates best practices in survey methodology and design and using procedures that have been thoroughly tested and refined based on a survey pilot or pretest.
3. Develop a robust sampling plan that results in complete household level data from up to 0.5 percent of the region's households with 80 percent of the survey assumed to be cross sectional while the rest allocated for oversampling geographies that are known to have a higher proportion of economically and socially disadvantaged households that have historically experienced lower than expected response rates.
4. Ensure that the survey methods incorporate the latest survey technologies, including smartphone GPS data collection, that have been tested for efficacy to improve overall response rates, reduce respondent burden, and minimize the adverse effects of non-response bias.
5. Manage and closely supervise the survey consultant to ensure that all survey procedures and protocols are being followed and carried out and to ensure the highest level of quality control.
6. After data collection, perform a rigorous review of the data files for quality control and consistency, resulting in the following data products from the survey in CSV format:
 - a. Household File: Characteristics of households, including, among others, household size, income, number of licensed drivers, housing type, and number of motor vehicles and bicycles.
 - b. Person File: Characteristics of individual persons, including, among others, demographic information, employment status, work location, and usual commute mode.
 - c. Vehicle File: Characteristics of household motor vehicles, including make, model, year, fuel type, and automatic toll payment transponder information.
 - d. Trip File: Recorded trip details, including origin/destination, start/end times, mode of travel, trip purpose, and transit access and egress.
 - e. Day File: Records for each day of the participant's assigned travel period.
 - f. Location File: Passively recorded trip location and point data captured by the smartphone app.
 - g. Sample File: Information about the sample, including participant address, letter date, X-Y coordinates, and recruitment and completion status.

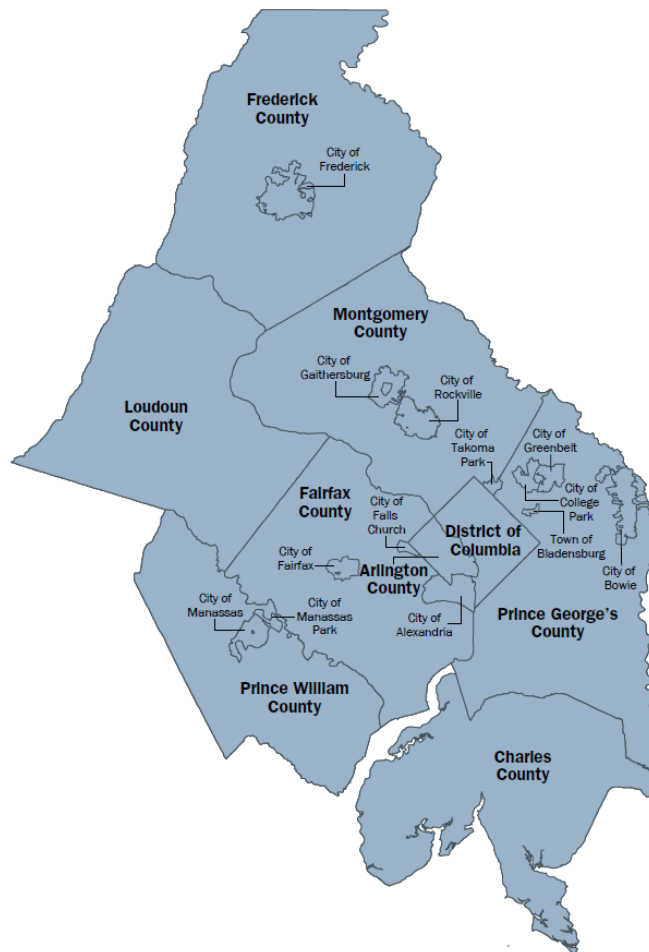
Figure 1 – Transportation Planning Board (TPB) Modeled Area



(Remainder of page intentionally left blank. Figure 2 follows.)

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Figure 2 – Transportation Planning Board (TPB) Planning Area



General Nature of Assistance Requested

COG/TPB is soliciting proposals from qualified survey consultants to recruit and obtain the participation of 10,000 households (a minimum of 8,000 households obtained from address-based sampling and up to 2,000 households obtained from probability and non-probability oversampling of harder to reach households) in a methodologically advanced regional household travel survey. The conduct of this survey will be based on procedures that have been thoroughly tested and refined through a full pretest of the proposed survey methodology. The enhanced methodological procedures used in this survey will be designed to make this survey as representative as possible of all population groups in the metropolitan region and minimize the adverse effects of non-response bias and the misreporting of daily travel behavior. COG/TPB staff will manage and supervise the survey consultant to ensure that all survey procedures and protocols are being correctly carried out and ensure overall quality control.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Approximately \$1,200,000 in COG/TPB FY 2026 funding has currently been budgeted toward consultant assistance in the conduct of the regional household travel survey in 2025 and 2026.

III. DEFINITIONS

A. Throughout this RFP, the following definitions shall apply:

1. COG/MWCOG Metropolitan Washington Council of Governments
2. *Contracting Officer*. The Executive Director of the Metropolitan Washington Council of Governments or their designee.
3. *Contractor*. An individual or organization awarded a prime contract based on this solicitation.
4. *Electronic Payment*. The payment of money to a vendor by electronic means, including by means of a purchase card (P-card) or Automated Clearing House (ACH) funds transfer method.
5. *Participating Agency*. Public entities participating in this procurement and receiving services under these contracts.
6. *Proposer*. The party of interest submitting a proposal in response to this RFP.
7. *Subcontractor*. An individual or business firm contracted to perform part or all of a Contractor's contract.
8. *Technical Selection Committee*. The Committee established to review proposals received in response to this solicitation and which recommends selection of contractors to the COG Contracting Officer.
9. TPB COG's Transportation Planning Board
10. MPO Metropolitan Planning Organization

IV. STATEMENT OF WORK

PROJECT TASKS:

TASK 1. PROJECT MANAGEMENT AND WORK PLAN

The consultant will develop a detailed work plan and schedule which will be reviewed by the COG/TPB Project Manager/Director and finalized. The proposals submitted in response to the RFP shall identify tasks, milestones, due dates, deliverables, and consultant personnel commitment in sufficient detail to permit COG/TPB to fully understand the intentions and activities of the consultant. This information will be used as the basis of the work plan and

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

schedule to be incorporated as an appendix into the consultant contract.

The work plan document should include a project management plan which should cover the following elements:

- Communication protocols for the project, which includes expectations for emails, phone calls, and meetings, including the development of project status updates that can be shared with the TPB.
- Defined roles and responsibilities for all involved staff.
- A draft project timeline for the full project with associated key milestones for tasks, deliverables, data collection periods and estimated review of deliverables timeline for COG/TPB staff.
- Identify potential project risks, analyzing their likelihood, impact and developing mitigation strategies should they arise.
- Enumeration of QA/QC procedures and protocols to ensure project data meets required quality levels for modeling and planning, including a description of data privacy and data protection procedures throughout the project.

The work plan must also include:

- A comprehensive list of each task and sub-task, a description of the intended approach, methods, targets (e.g., surveys to be completed, performance targets), practices, due dates, and other resources used to achieve project outcomes. Much of this list can be developed from this scope of work.
- A description of the sampling approach, sampling plan and questionnaire design process, a draft questionnaire and a list of data items to be collected. The sampling approach and sampling plan should also include a section that describes oversampling approaches that target hard-to-reach populations and households.
- A description of recruitment protocols and non-response follow-up procedures to encourage survey participation, in addition to a plan to administer and distribute the survey participation incentive.
- A description of how public outreach and survey notification will be integrated into the project (including press releases, videos, contact options for legitimacy verification, website, and social media) with particular attention to improving the response of hard-to-reach populations (e.g., immigrants with limited English proficiency or a distrust of government).
- A detailed project schedule that lists each of the tasks by number of weeks from notice to proceed, indicating task progress, key deliverables, and period of data collection.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Task 1 Deliverables:

1. Meeting agenda and minutes
2. Weekly check-in calls during survey planning, bi-weekly check-in calls during survey implementation
3. Draft Work Plan and Project Schedule
4. Final Work Plan and Project Schedule

TASK 2. DEVELOP AND REFINE SURVEY INSTRUMENT AND DATA ITEMS

Data Elements

COG/TPB staff plans to use a travel diary app/web survey as the primary means of collecting detailed demographic and travel behavior information from a statistically robust and representative sample of households and persons in the TPB Modeled Area. COG/TPB staff will draft and finalize a list of all key data elements to be contained in the household, person, vehicle, trip, day, location, and sample files, to be shared with the consultant. These data elements will be essential information that will be used to develop COG/TPB's regional travel demand model. Based on these data elements, the consultant shall draft survey questionnaires for the 2025/2026 RTS that collect data that are comparable to data collected in the previous RTS, and suitable for both trend analysis and model development. The consultant shall refer to survey instruments from previous TPB household travel surveys such as the 2017/2018 RTS to ensure that the question wording and answer choices are relatively consistent but also allow flexibility for new questions that capture more recent travel behavior modes such as micromobility, and to assess post-pandemic trends. After COG/TPB has approved the list of data elements and draft questionnaire, the consultant will program the survey to a smartphone app/web-based survey instrument. This step will occur only after the survey instrument and the data items have been approved by COG/TPB staff.

Data Collection Method

The consultant will propose the travel diary app and a data collection methodology that ensures that the travel diaries will be demographically inclusive. While the smartphone app/web survey should be the predominant method for collecting information from travel diaries, the consultant should also propose secondary data retrieval methods such as computer assisted telephone interviews (CATI) to make the survey inclusive to populations that do not have access to smartphones and/or the internet. The consultant will also need to describe how they will capture or impute missing information from travel diaries.

Survey Instrument Design

The consultant must design a survey instrument with an intuitive interface that is attractive and easy to complete and minimizes respondent burden. The draft survey instrument for both the travel diary app and the web-based survey should be tested by COG/TPB staff before implementation for the pretest. After the pretest, the consultant shall make

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

additional changes and modifications based on the pretest results and findings to improve data collection methods, survey completion rates, and to respond to evolving data collection needs from COG/TPB staff and its regional stakeholders. The survey instrument should incorporate the latest technology and state of the practice in travel survey app and web-based surveys, including skip logic and interactive elements to make the survey more interesting, accessible, and easy to complete for survey participants.

To ensure representativeness of data collection, survey instrument translations to Spanish and other non-English languages that are prevalent in the National Capital Region should be anticipated.

Proxy Reporting

The consultant must also propose how they intend to capture proxy-reported travel of household members who are children. For example, children under 13 years of age should have their travel reported by an adult in the household, and those children between 13 and 17 years of age with a smartphone must obtain written consent from their parent or legal guardian. While the travel diary should be completed by each adult member of the household, there may be other circumstances, such as individuals with literacy or disability challenges, where proxy response may occur, and a household member completes the travel diary on behalf of other household members.

Survey Participation Incentive

The consultant must propose an incentive plan to encourage survey participation and to distribute to households that fully complete the survey. In previous household travel surveys, electronic and physical gift cards were distributed to households, and COG/TPB recommends this approach for this survey. Electronic and physical gift cards shall be distributed to households who provide contact information such as email addresses and phone numbers. The gift card should be easy to redeem and use (such as an Amazon gift card) and should not expire or lose value over time.

Criteria for Survey Complete

In general, all household members should complete the survey regardless of a person's age to be considered a survey complete. For household sizes of four or larger, all but one household member must complete the survey. The consultant should recommend an approach for handling non-related individuals in a household. The criteria to define a "completed household" for incentive eligibility ("incentive complete") will be agreed upon by the consultant team and COG/TPB staff. However, for a household to be counted as a "survey complete" that would satisfy the survey completion goal, all household members need to complete the survey with the exception of larger households (4+ persons) as previously noted. **At a minimum, a completed household should contain detailed demographic and travel diary information from every member of the household for at least one concurrent weekday (defined as Monday through Friday).** The incentive level and the incentive complete criteria may be reassessed after the pretest findings.

Communication Protocol

The consultant shall provide technical assistance to survey respondents by providing contact information on survey recruitment materials, survey website and on the travel diary

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

app/web survey. These should include a toll-free phone number, project email address, website URL, a feedback/comment form on the smartphone app, and comment boxes in the web survey. Responses to inquiries should be handled in a timely manner, preferably within one business day of receiving the inquiry.

Task 2 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. List of data elements for the household, person, vehicle, trip, day, location, and sample files
2. Travel diary questionnaire for both smartphone app and web versions
3. Web-based survey instrument
4. Proxy reporting procedures
5. Survey incentive plan

TASK 3. DEVELOP SAMPLING PLAN AND RECRUITMENT APPROACH

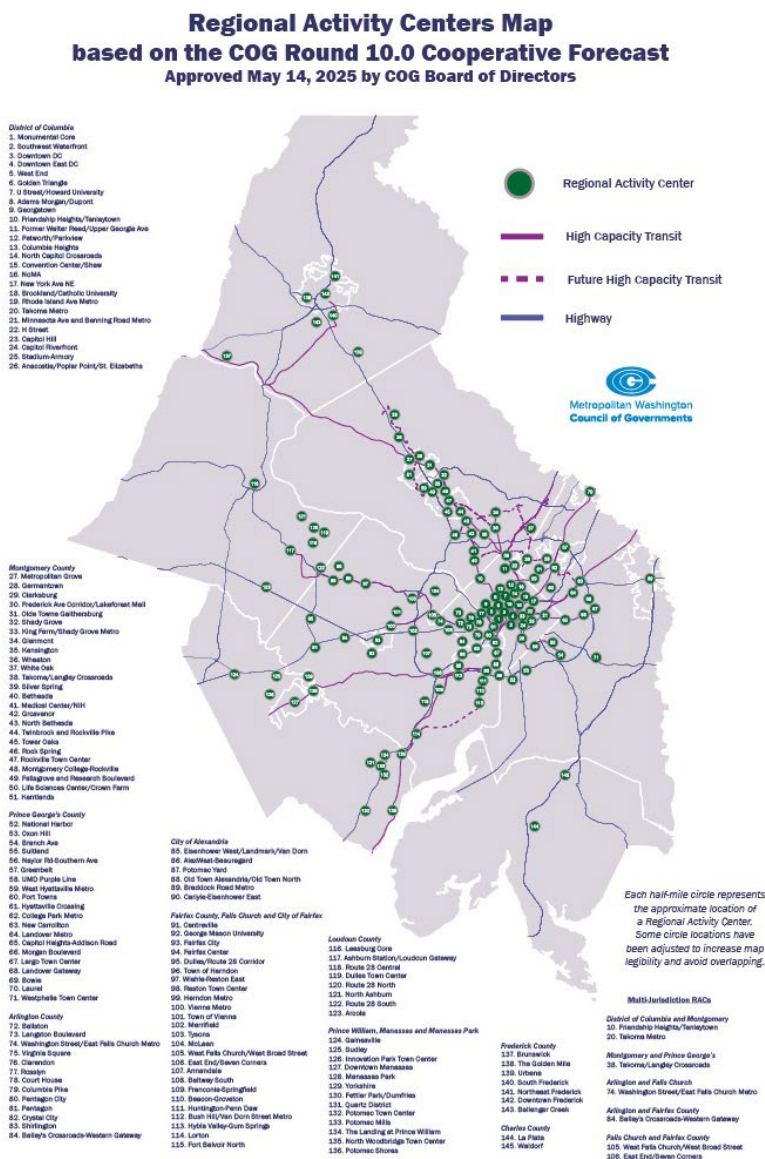
The consultant shall work with COG/TPB staff to develop a sampling plan and recruitment approach that would yield a statistically robust and representative sample of a minimum of 8,000 households obtained from address-based sampling and up to 2,000 households obtained from probability and non-probability oversampling of harder to reach households for the TPB Planning Area for up to a 7-day survey period including weekdays and weekends (*Figure 1 – TPB Modeled Area*). This includes 22 county/city-level jurisdictions (and portions of counties) in the District of Columbia, Maryland, Virginia, and West Virginia.

These should be stratified by jurisdiction and geographical areas within the region's larger suburban jurisdictions, with a specified minimum number of completed household interviews obtained in each jurisdiction and area-type stratum to stratify households within and outside of Regional Activity Centers. The sampling plan for the 2017/2018 RTS (refer to the 2017/2018 Regional Travel Survey Technical Documentation) should be used as an example for developing jurisdiction and area-type stratum based on whether households live within and outside of COG-designated Regional Activity Centers (*Figure 3 – Regional Activity Centers*).

**** Remainder of page is blank, Figure 3 follows ****

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Figure 3 – Regional Activity Centers



With input from COG/TPB staff, the consultant shall propose a sampling plan that engages up to 0.5 percent of the region's households with 80 percent (minimum of 8,000 households) derived from an address-based sample (ABS) based on probability sampling. The remaining 20 percent (up to 2,000 households) should be allocated for oversampling geographies that are known to have a higher proportion of economically and socially disadvantaged households that have historically experienced lower than expected response rates. The consultant team will provide a framework for oversampling households in these geographies which may include non-probability-based sampling approaches. Types of households that have been identified as hard-to-reach in previous household travel surveys include low-income households, households without motor vehicles, non-white headed households (especially Hispanic/Latino and African American households), non-English

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

speaking households, and larger (4+ persons) households.

While COG/TPB will provide specific sampling targets by jurisdiction/regional activity centers and require that the majority of household “completes” are obtained using a probability-based sampling approach, COG/TPB is open to the consultant’s suggestions on approaches for sampling the hard-to-reach populations noted above, including non-probability-based sampling methods. The consultant should provide input on evaluating the data collection, cost, and data quality tradeoffs of employing a mixed-methods approach and address the feasibility of implementing a non-probability based (e.g., convenience) sampling approach.

The consultant will also develop a sampling plan and recruitment approach for the pretest survey. The pretest survey should be of sufficient size to yield 500 completed household interviews (5% of the target number of completed households). A completed household interview should include demographic and travel diary information obtained from 100% of household members with the exception of larger households (4+) as per the survey complete criteria.

Based on the pretest results, the consultant will develop a robust sampling plan and recruitment approach for the main survey which include both an address-based sampling approach and oversampling of hard-to-reach households to ensure sufficient representation from these groups. COG/TPB staff will review and approve the sampling methodology before the main survey begins.

Task 3 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Pretest sampling plan and recruitment approach
2. Main survey sampling plan and recruitment approach

TASK 4. DEVELOP OUTREACH APPROACH

In preparation for the pretest, which shall include a non-probability sample to improve response from hard-to-reach populations, the consultant will develop an outreach approach to identify and reach out to target populations. In the 2017/2018 Regional Travel Survey, a special outreach effort was conducted to promote survey outreach and participation in parts of the TPB region with high concentrations of Latino/Hispanic households since this population has been historically underrepresented in previous COG/TPB survey efforts. COG/TPB believes it is very important to expand survey outreach to hard-to-reach communities so that their voices are heard, and the transportation needs of their households are more fully represented in preparing future transportation plans and programs. To that end, the consultant will develop an outreach plan to engage these communities in the region. The outreach plan should include details on how the consultant plans to reach out to these communities, including online and/or printed materials that will be developed that are accessible in Spanish and other languages that are dominant in the metropolitan Washington region, community organizations and/or schools that would be

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

engaged, and how households in hard-to-reach communities will be recruited into the survey effort. Upon completion of the pretest and based on the pretest results, the consultant shall submit a revised outreach approach memorandum.

Task 4 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Outreach approach memorandum (before pretest)
2. Revised outreach approach memorandum (after pretest)

TASK 5. CONDUCT AND EVALUATE PRETEST RESULTS

Conduct Survey Pretest

After approval of the survey procedures and materials by the COG/TPB Project Manager/Director, the consultant will conduct a full pretest of all aspects of the 2025/2026 Regional Travel Survey. This pretest is to be of sufficient size to yield 500 completed household interviews using the target allocations described in Task 3.

Proposals submitted in response to this RFP shall clearly describe where, when and how the household interviewing for the survey pretest is to be conducted. In addition, the consultant response to this task shall specifically describe the following:

- a) The recruitment strategies that will be used to encourage households to participate in the survey, especially for recruiting historically hard-to-reach households;
- b) The sampling techniques that will be used to ensure the collection of data from a completed sample of households that is representative of all household sizes, including both probability approaches using address-based sampling and non-probability sampling approaches for increasing response rates from hard-to-reach households, which should roughly match the 80 percent ABS/20 percent oversample split in the main survey;
- c) How survey participation incentives will be administered, including the size and form of monetary incentives (including differential incentives) and what type of households should be targeted for incentives;
- d) Oversampling of households in geographies that are known to have a higher proportion of economically and socially disadvantaged households that have historically experienced lower than expected response rates;
- e) How the survey will allow participation from non-English speaking households;
- f) Protocol for establishing household contacts and re-contacts, and responding to participant inquiries;
- g) Estimated household recruitment and household travel data retrieval response rates;

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

- h) How the data collected will be checked, edited, and validated;
- i) How missing data items will be handled and imputed;
- j) Detailed documentation on which QA/QC checks will be performed for data collected from each data collection method (i.e., CATI, smartphone app, and web survey);
- k) Survey management, data collection monitoring, and quality control procedures that will be employed.

Evaluate Survey Pretest Results

The consultant will provide the COG/TPB Project Manager/Director with (1) all raw and edited, geocoded survey data files from the survey pretest; (2) the file descriptions and other documentation for these survey data files; and (3) a short report that summarizes the major results of the survey pretest, that includes an analysis of the non-responding households, the primary reasons for this non-response, and a comparative evaluation of the completeness and quality of the data obtained from 500 pretest households. This short report shall include lessons learned from the pretest and include any recommended refinements and revisions to survey methods, materials, and procedures for the main household travel survey. This report shall also include an updated estimate of the cost per completed household interview to conduct the main household travel survey.

Task 5 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Pretest survey operations plan
2. Pretest survey data files
3. Pretest survey report documenting results and key findings
4. Presentation slide deck summarizing pretest survey findings

TASK 6. REFINE SURVEY METHODS, MATERIALS, AND PROCEDURES FOR THE MAIN SURVEY

The consultant will review the results of the survey pretest with the COG/TPB Project Manager/Director and recommend any needed revisions and/or improvements to the survey methods, materials, and procedures for the main survey based on evaluation of the pretest results. After the COG/TPB Project Manager/Director's approval of any of these recommended revisions, the consultant will make the agreed-upon changes to the survey methods, materials, and procedures and document these changes in a technical memorandum.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Task 6 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Revised survey methods, materials, and procedures memorandum
2. Revised work plan and project schedule

TASK 7. SURVEY IMPLEMENTATION AND DATA MONITORING

Based on the sampling plan and recruitment approach outlined in Task 3, the outreach approach in Task 4, lessons learned from the pretest survey in Task 5, and revisions to the survey methods, materials, and procedures for the main survey in Task 6, the consultant will perform all survey data collection work for the main survey. The consultant should implement the main survey effort no later than Fall 2025 extending into Spring 2026, with a minimum of 6 months of data collection. The consultant shall make a recommendation on the survey fielding period.

Data monitoring should occur throughout data collection which should allow for a reasonable forecast of final survey completes and results, both overall and across strata and demographic groups. The consultant will provide COG/TPB staff access to a web-based survey dashboard weekly survey progress reports throughout the duration of the data collection effort. The consultant should develop a database/web application to record survey responses and allow COG/TPB staff to monitor survey responses and progress towards meeting the overall sampling targets and number of survey responses. If feasible, the dashboard should include a map-based monitoring tab which allows for the tracking of response rates and the number of survey completes to date across the region, county-level jurisdiction, and strata. The consultant shall also provide the number of incentive completes and survey completes (as defined in the survey complete criteria) by county-level jurisdiction and survey strata in a weekly survey progress report by email. The consultant will be expected to program the backend requirements and maintain an internal database during the duration of data collection.

The consultant will monitor survey responses and inform COG/TPB staff if any problems arise and try to correct these problems in a timely fashion during survey fielding. The consultant should also review the survey response data for quality control and consistency. Additionally, the consultant will provide a data cleaning and data preparation plan which outlines their methodology for conducting survey data post-processing to correct for identifiable inconsistencies and inaccuracies in the data. The data cleaning and preparation plan should also include the protocol for logging the data cleaning process for flagged data records such as how many invalid records were removed and what values in the data table have been modified.

To ensure the quality and consistency of the data, the consultant shall provide an interim data deliverable after receiving 1,000 survey completes to COG/TPB staff for review.

Task 7 Deliverables:

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Weekly survey progress reports via email reporting the number of survey completes to date during data collection
2. Main survey database/web application that allow monitoring of survey responses during data collection in real-time
3. Main survey data cleaning and data preparation plan
4. Interim data deliverable after 1,000 survey completes

TASK 8. PERFORM DATA EDITING, CONSISTENCY CHECKS, AND IMPUTATIONS

Based on the survey data cleaning and data preparation plan in Task 7, the consultant will prepare a cleaned set of survey files for post-survey data editing, consistency checks, and imputations such as including matching the sample address with the home addresses provided by respondents (i.e., verifying home addresses), checking X-Y coordinates of trip origins and destinations, re-coding of “other, please specify” options for questions in the household, person, vehicle, and trip files, checking reported travel modes and triangulating with passively recorded data such as timestamps to ensure reasonableness and accuracy and performing imputations for missing data items that could be derived from other data items. The consultant should refer to the 2017/2018 Regional Travel Survey Technical Documentation to see what types of data post-processing were performed. [refer to Exhibit 1 RTS Technical Documentation in the RFP]

Task 8 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Documentation outlining the data editing, consistency checks, and imputations performed on the data files
2. Cleaned, unweighted dataset of household, person, vehicle, trip, day, location, and sample files

TASK 9. PERFORM DATA WEIGHTING AND EXPANSION

The consultant shall work with COG/TPB staff to perform the data weighting and expansion for households, persons, vehicle and person trips to ensure that the weighted summarization of key measures or variables (e.g., population, number of households, trip mode) match regional control totals validated to external sources such as vehicle counts, transit boardings, and data from the US Census American Community Survey (ACS).

With input from COG/TPB staff, the consultant shall perform the data weighting and expansion and then provide guidance to COG/TPB staff on how to apply the code and validate the weights for future model updates. COG will establish a GitHub repository to manage project scripts and provide the consultant with access. The contractor must include clear and detailed comments explaining any modifications. A document should be provided to describe the weighting process, including instructions on how to run the weighting scripts. Separate household, persons, vehicle, and trip weights should be developed for weekday and weekend days. All code and data used to weight the survey should be provided to COG/TPB staff. The consultant will guide COG/TPB staff on how to validate the quality of results of the weighting. In addition, consultants will be expected to plan for and discuss how the expansion weights will change in future years when the next Regional Travel Survey is conducted 3-5 years following this survey. Consultants should guide COG/TPB staff on re-weighting for updates with newer Census data and updated external sources such as vehicle counts and transit boardings.

Task 9 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Technical memo detailing the data weighting and expansion procedures performed
2. Weighting and expansion scripts in Python format
3. Final weighted and expanded dataset of household, person, vehicle, trip, day, location, and sample files in comma-delimited (CSV) file format

TASK 10. PREPARE FINAL SURVEY REPORT AND TECHNICAL DOCUMENTATION

The consultant will prepare a final survey report and technical documentation which should include a summary of methodology used on the project as a reference for COG/TPB staff, regional stakeholders, and researchers using this dataset for future analyses. The consultant will document each element of the project. The consultant should refer to the 2017/2018 Regional Travel Survey Technical Documentation as an example of the survey report and technical documentation expected for this project. [refer to Exhibit 1 RTS Technical Documentation].

The documentation will include summary statistics and meta-data of the overall survey response. This includes for example summary statistics for sample subgroups (e.g., as stratified and oversampled), participation rates (i.e., completed surveys, partial surveys, etc.), completed responses in each cell of the sampling stratification, completed response

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

rates by question, cross-tabulations, and other similar descriptors agreed upon by consultant and COG/TPB staff.

The documentation will include an analysis of results to facilitate informed understanding of the dataset for COG/TPB travel modeling staff who will subsequently work with the datasets to develop COG/TPB's regional travel demand model. This section also will include a summary of modeling implications in working with smartphone GPS data and/or a comparison of 2025/2026 Regional Travel Survey results to the previous survey results from 2017/2018.

Task 10 Deliverables:

For all deliverables, the consultant will provide drafts to be reviewed by COG/TPB staff, and then the consultant will provide finalized versions that incorporate feedback from COG/TPB staff.

1. Final survey report and technical documentation which includes a summary of methodology, summary statistics and meta-data of the overall survey response, and an analysis of results to facilitate understanding of the dataset for COG/TPB modeling staff to develop the regional travel demand model.
2. Presentation slide deck summarizing final survey findings

V. PERIOD OF PERFORMANCE

The Period of Performance for this work shall be one (1) year from the date of contract execution.

VI. PRICES/BILLING

- A. Unless stated otherwise below, all prices offered by Proposers shall be firm against any increase for the duration of the initial contract period. Proposers shall include price increases for the optional renewal periods given above as part of their Proposal.
- B. Delivery charges, fees, insurance, expenses, and/or overhead shall be included in the total price. Legal fees, of any type, are not allowable without prior written approval of COG.
- C. Travel costs will not be reimbursed at a rate above the then-current Federal Government Services Administration Privately Owned Vehicle mileage reimbursement rate (see <https://www.gsa.gov/travel/plan-book/transportation-airfare-pov-etc/privately-owned-vehicle-pov-mileage-reimbursement-rates>).
- D. Contractor's billing system shall ensure that invoices do not include sales tax. COG, and any Participating Agencies, will provide certificates of exemption for sales tax upon request.
- E. For all transactions, a Contractor shall have a current valid COG requested forms on file, and required certifications on file with the Participating Agency prior to beginning work.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

VII. QUESTIONS CONCERNING THIS RFP

- A. All questions concerning this RFP must be submitted in writing, via email to Bonfire portal no later than 2:00pm Eastern Time, ten (10) business days before due date of the proposals.
- B. Answers shall be provided no later than five (5) business days before the due date of the proposals.

VIII. DISADVANTAGED BUSINESS ENTERPRISE (DBE)

- A. Disadvantaged Business Enterprise ("DBE") participation shall be an integral component of the Contractor selection process for this RFP. COG's DBE Policy may be viewed on its website www.mwcog.org. Responding firms shall submit with their proposals a DBE Participation Plan to meet this goal. The plan shall identify any DBE (defined in 49 CFR Part 26) that shall be participating in the Contract, including the Proposer.

The plan shall include the name and address of the participating firm, a copy of the firm's current DBE Certification from any federal, state, or local government agency that certifies DBE ownership (please note only DBE certifications will be accepted by COG for this purpose). *Failure to provide DBE certification proof with the submission will result in no points being awarded for DBE. No exceptions.*

- B. COG, in accordance with Title VI of the Civil Rights Act of 1964 and 78 Stat. 252, 42 USC 2000d - 42 and Title 49, Code of Federal Regulations, hereby notifies all proposers that it will affirmatively ensure that any contract entered pursuant to this advertisement will afford minority business enterprises full opportunity to submit bids in response to this invitation, and will not discriminate on the grounds of race, color, sex, or national origin in consideration for an award.
- C. DBE Assurance – The Contractor or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.
- D. A total of 15 possible points (out of a maximum of 100 points) may be awarded for DBE participation, as measured in dollars, either as the Contractor or "Subcontractor". In the event of a tie score between two (2) or more proposals, the proposal with the largest percentage of DBE participation, as measured in dollars, will be awarded the contract. DBE points are to be awarded as follows:

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

PARTICIPATION POINTS

10% to 14%	3
15% to 19%	6
20% to 24%	9
25% to 34%	12
35% or more	15

- E. Failure to have DBE participation does NOT disqualify a Proposer from being awarded a contract.
- F. This DBE section will be updated as legally required.

IX. EVALUATION AND SCORING CRITERIA

- A. The proposals will be evaluated by a Technical Selection Committee made up of subject matter experts.
- B. In evaluating the proposals, the following factors will be considered, with points awarded up to the maximum shown:

Scoring Factor Chart	
Factor	%
<i>File A: Technical Proposal</i>	
Understanding of the Requirements of the RFP, Technical Quality of the Proposal, and Project Approach	40
Demonstrated knowledge and experience of Key Personnel and availability of Key Personnel	25
<i>File B: DBE, Pricing Proposal, and Forms</i>	
DBE Participation	15
Cost Proposal	20
TOTAL	100

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

X. PROPOSAL INSTRUCTIONS

All Offerors must submit their proposals following the prescribed format. Adherence to the proposal format by all Offerors will ensure a fair evaluation regarding the needs of COG. Offerors not following the prescribed format will be deemed non-responsive. The letter transmitting the proposal must be signed by an officer authorized to bind the Offeror. All required pages are included in the page count. The proposal must include the following:

Volume 1 Technical Response (Max pg length 60 pgs; Min font size 11 pt.(Graphics 10 pt)

Letter of Interest - The requested Letter of Interest must be signed by an authorized principal or agent of the Proposer, and provide an overview of Proposer's offer, as well as a name, title, phone number, and email address of the person to whom questions may be directed concerning the proposal.

Table of Contents
Executive Summary

A. Section 1 - Qualifications of the firm and key personnel

1. This section shall provide the professional credentials and expertise of the Offeror and key personnel assigned to this project.
2. Do not include any cost or pricing information in the technical section
3. Although standard personnel resumes may be included as attachments to the proposal in Volume II, amplification specific to this solicitation is required in this section. The absence of such project specific information shall cause the proposal to be deemed non-responsive.

B. Section 2 - Proposed method to accomplish the work

1. In this section of the proposal, Offerors must provide a detailed description of their approach for accomplishing the tasks specified herein. This section shall include a work plan, schedule, and a project management plan that will detail all lines of authority and communication which will support all the project requirements and logically lead to the deliverables required in this RFP. A matrix shall be provided which will identify, by task, key personnel assignments.
2. Offerors should explain any deviation from the stated Scope of Work.
3. Timely completion of the task orders outlined and issued for this project is of critical importance. Offerors are to provide a brief description of their current projects and the availability of key personnel proposed in this project.
4. Offerors must provide an example scope of work, technical approach, work plan, and proposed staffing for one of the optional tasks that may be issued under this contract. In developing the writeup for this example, Offerors may select from one

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

of the travel monitoring studies briefly described in the Scope of Work - Section III, D, 1 of this RFP, or another type of travel monitoring study of the Offeror's choosing.

5. Offerors may propose multiple options/approaches based on needs and budget. Offerors are encouraged to think creatively. However, all options must demonstrate that they can fulfill the project requirements as outlined in the RFP.

C. Section 3 - References AND Resumes of the CONTRACTOR and any proposed subcontractor(s)

1. The proposed CONTRACTOR and any Subcontractor(s) shall provide at least three (3) references who COG may contact regarding similar work performed. See Attachment C for form to be used.
2. Offerors may provide letters of reference from previous relevant clients. Names, titles, addresses and telephone numbers shall be included for each reference.
3. All three of these references shall include work in which the key personnel proposed to COG have been assigned.
4. Resumes of Key Personnel (Max page length 20 pages; Min font size is 11 pt (Graphics 10 pt)

D. Section 3 Marketing Materials (optional)

- Offeror may include project specific marketing materials only. Do not include general corporate marketing materials.

Volume 2 Cost proposal / Resumes for the Prime CONTRACTOR/Offeror and all Subcontractor(s)

Section 1 Cost Detail and Summary

1. Provide the total costs, including all expenses, profits and fees to be charged to COG/TPB for providing the services described above. In addition, should any commissions be anticipated for media placement, those commissions shall be specified.
2. Cost Summary Table
3. Do not include any cost or pricing in the Technical Section

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Volume 3 - Administration and Forms

Proposers must include in their RFP submission the additional documentation specified below or they may be determined to be non-responsive and disqualified.

- i. Proposal Response Form provides and Checklist and authorized signature submission
 - ii. Exception to the Terms and Conditions and/or Exceptions to the RFP Any and all exceptions to the RFP including the Terms and Conditions (Exceptions to the RFP, Exceptions to Terms and Conditions).
 - iii. DBE Plan: DBE Plan and certification(s) from all qualified DBE vendors referenced
 - iv. Proof of Insurance A Certificate of Insurance demonstrates that the Proposer, as of the time of Proposal, maintains all insurances requested in Attachment A, Paragraph IX Proposal
 - v. Good Standing Letter: Issued by your corporation jurisdiction.
 - vi. Please complete attached PROPOSER REFERENCES, attached as described above
 - vii. Each Proposal shall be accompanied by a NON-COLLUSION AFFIDAVIT regarding price fixing, gratuities, bribery, and discriminatory employment practices. When the Proposer is a corporation, a duly authorized representative shall execute the affidavit
 - viii. Each Proposal shall be accompanied by a DBE PLAN GOALS SUBMISSION FORM, even if Proposer is not a DBE and does not intend to include DBE subcontractors
- a. All Proposals must be completed by responsible company officials and submitted to the COG LOCKBOX on or before the due date and time.
 - b. Proposals will not be accepted if submitted through hard copy, mail, courier, fax, email, or any other electronic method except as described below. Proposals submitted through any method other than the COG LOCKBOX system will be rejected.
 - c. Bidders shall submit files to the COG LOCKBOX system as follows in XI. SUBMISSION INSTRUCTIONS.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

XI. SUBMISSION and LOCKBOX INSTRUCTIONS

- A. **Proposals shall be received via “Lockbox” by no later than 2:00 pm ET June 20, 2025.**
- B. **Be sure check updates to due date on the Bonfire portal and/or COG website.**
- C. Submissions for this RFP must be made electronically to COG’s solicitation “Lockbox.”

COG has replaced its prior submission system. Be sure to review the instructions below for current access and submission requirements.

**Proposers shall submit electronic files to the Bonfire system at
<https://mwkog.bonfirehub.com/opportunities>.**

- D. All Questions must be submitted to and Answers responded via the Lockbox portal – see Section X. for instructions.

Lockbox Submission Instructions are as follows:

1. Offerors shall submit one (1) electronic copy of their qualifications to the COG Lockbox system as per the below directions.
2. Proposals may not be submitted through hard copy, fax or other electronic methods except as designated below.
3. The Technical proposal shall be organized according to the Proposal Instructions above AND documents must be uploaded to the submission portal (see 7. Below). Proposals not following the prescribed format may be deemed nonresponsive.
4. The requested Letter of Interest must be signed by an authorized principal or agent of the Proposer, and provide an overview of Proposer’s offer, as well as a name, title, phone number, and email address of the person to whom questions may be directed concerning the proposal.
5. All Proposal forms must be completed by authorized company officials and submitted to the Bonfire system on or before the due date and time.
6. Proposals will not be accepted if submitted through hard copy, mail, courier, fax, email, or any other electronic method except as described below. Proposals submitted through any method other than the Bonfire system will be rejected.
7. Proposers must include in their RFP submission the additional documentation specified below or they may be determined to be non-responsive and disqualified.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

i. Required COG forms include:

1. Proposer References
2. DBE Plan and Response form
3. Anti Collusion/Debarment form
4. Debarment Form
5. Proposal Response form (checklist)

ii. Required Proposers' files/forms include:

1. Letter of Interest
2. Technical Proposal
3. Price Proposal
4. Project Resumes/Samples
5. Exceptions to the RFP, if any
6. Exceptions to the Terms and Conditions, if any
7. Proof of Insurance
8. Jurisdiction Good Standing Letter
9. Marketing Material (optional)

8. To contact COG or to ask questions in relation to this RFP, Proposers must register with COG's public purchasing portal at the above URL and initiate the communication electronically through the Vendor Discussion or Ask a Question feature. COG will not accept any communications regarding this RFP via other means. Attempts to contact COG employees regarding this RFP through any other means than the above may result in disqualification of the Proposer.
9. Please do not wait until the last moment to register. If problems occur during registration or submission, please contact Bonfire at support@gobonfire.com, or the questions portal.
10. All questions regarding discrepancies, omissions, specifications, instructions, or the required forms may be directed via the Bonfire portal no later than ten (10) business days in advance of the deadline via the Bonfire system. COG will post any addendum necessary to address questions no later than five (5) working days before the due date of proposals.
 1. Proposal responses should indicate that Proposers have reviewed the latest addenda on the Proposal Form via the Proposal Form Checklist.
 2. Proposers must acknowledge their understanding of all terms listed in this RFP by signing the Proposal Form as part of their submission.
 3. Any variation to the solicitation specifications should be noted by the Proposer as an exception with an explanation attached to the Proposal Form.
 - i. Exceptions taken do not obligate COG to change the specifications.
 - ii. In some cases, exceptions may result in the Proposer being disqualified or result in a lower score in the evaluation process.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

- iii. Failure to report exceptions with the submission may result in withdrawal of award if exceptions to the RFP are raised after award.
 - iv. DO NOT email submissions and/or questions directly to COG; they will be disqualified.
11. Proposals may not be submitted through hard copy, fax or other electronic methods except as designated below.
12. Offerors shall submit one (1) electronic copy of their qualifications to the COG Lockbox system as per the stated directions.
13. The Technical proposal shall be organized according to the VII. Proposal Instructions above AND documents must be uploaded to the submission portal (see 7. Below). Proposals not following the prescribed format will be deemed nonresponsive.
14. The requested Letter of Interest must be signed by an authorized principal or agent of the Proposer, and provide an overview of Proposer's offer, as well as a name, title, phone number, and email address of the person to whom questions may be directed concerning the proposal.
15. All Proposal forms must be completed by authorized company officials and submitted to the Bonfire system on or before the due date and time.
16. Proposals will not be accepted if submitted through hard copy, mail, courier, fax, email, or any other electronic method except as described below. Proposals submitted through any method other than the Bonfire system will be rejected.
17. Proposers must include in their RFP submission the requested documentation specified below or they may be determined to be non-responsive and disqualified.
18. To contact COG or to ask questions in relation to this RFP, Proposers must register with COG's public purchasing portal at the above URL and initiate the communication electronically through the Vendor Discussion or Ask a Question feature. COG will not accept any communications regarding this RFP via other means. Attempts to contact COG employees regarding this RFP through any other means than the above may result in disqualification of the Proposer.
19. Please do not wait until the last moment to register. If problems occur during registration or submission, please contact Bonfire at support@gobonfire.com, and cc purchasing@mwkog.org.
20. All questions regarding discrepancies, omissions, specifications, instructions, or the required forms may be directed via the Bonfire portal no later than ten (10) business days in advance of the deadline via the Bonfire system. COG will post any addendum necessary to address questions no later than five (5) working days before the due date of proposals.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

21. Proposal responses should indicate that Proposers have reviewed the latest addenda on the Proposal Form via the Proposal Form Checklist.
22. Proposers must acknowledge their understanding of all terms listed in this RFP by signing the Proposal Form as part of their submission.
23. Any variation to the solicitation specifications should be noted by the Proposer as an exception with an explanation attached to the Proposal Form.
24. Exceptions taken do not obligate COG to change the specifications.
25. In some cases, exceptions may result in the Proposer being disqualified or result in a lower score in the evaluation process.
26. Failure to report exceptions with the submission may result in withdrawal of award if exceptions to the RFP are raised after award.
27. DO NOT email submissions and/or questions directly to COG; they will be disqualified.

(Remainder of page intentionally left blank. Proposal form begins on following page.)

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

XII. PROPOSAL FORM

TO: Metropolitan Washington Council of Governments

COMPANY NAME: _____

Required Document Checklist

Items	Acknowledgment/Attached	
Technical Proposal	YES_____	NO_____
Pricing Proposal	YES_____	NO_____
Attachment A: COG Standard Terms and Conditions (<i>acknowledged</i>)	YES_____	NO_____
Attachment B: Past Performance and References (With Technical Proposal)	YES_____	NO_____
Attachment C: Non-Collusion Affidavit	YES_____	NO_____
Attachment D: DBE Plan Goals Submission	YES_____	NO_____
Attachment E: Cooperative Purchasing Program Rider Clause (<i>acknowledged</i>)	YES_____	NO_____
Exceptions Taken*	YES_____	NO_____

If any exceptions are taken, including the Terms and Conditions, please attach them on separate sheet(s) at the end of the proposal submission. **It is imperative that exceptions be indicated with the submission in order to evaluate the responsiveness of the proposal.*

Addendums (if applicable)	Acknowledgement	
Addendum #1 (if applicable)	YES_____	NO_____
Addendum #2 (if applicable)	YES_____	NO_____
Others _____	YES_____	NO_____

Payment

Can accept Electronic Payments	YES_____	NO_____
--------------------------------	----------	---------

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Signature Section

I have read, understood, and agreed to the terms and conditions of all contents of this RFP. The undersigned agrees to furnish the commodity or service stipulated in this RFP as stated above.

AUTHORIZED COMPANY OFFICIAL

SIGNATURE: _____

NAME: _____

COMPANY: _____

ADDRESS: _____

TELEPHONE: _____

EMAIL: _____

ALTERNATE CONTACT

NAME: _____

COMPANY: _____

ADDRESS: _____

TELEPHONE: _____

EMAIL: _____

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

ATTACHMENT A: COG STANDARD TERMS AND CONDITIONS

***NOTE:** COG will not negotiate Terms and Conditions at the time of contract award. Exceptions to the Terms and Conditions MUST be made as part of the Proposal. Failure to do so may disqualify the Proposer now or at a later time.*

This document sets out provisions generally applicable to Metropolitan Washington Council of Governments (“COG”) contracts. The provisions herein do not constitute a complete agreement, and must be appended to a document, executed by all parties, which identifies the specific work to be performed, compensation, term, incorporated attachments, and special conditions, if any.

I. Compliance with Law

CONTRACTOR hereby represents and warrants that:

- A. It has the power and authority to enter into and perform the Contract, that the Contract, when executed and delivered, shall be a valid and binding obligation of CONTRACTOR, enforceable in accordance with its terms.
- B. Its performance under the Contract shall be in a good and workmanlike manner and in accordance with all applicable professional standards.
- C. It is qualified to do business in the jurisdictions covered by the Contract and that it will take such action as, from time-to-time hereafter, may be necessary to remain so qualified.
- D. It is not in arrears in the payment of any obligations due and owing to any agency involved in this Contract, including, but not limited to, the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of this Contract.
- E. It shall comply with all federal, state, and local laws, regulations, and ordinances applicable to its activities and obligations under this Contract.
- F. It shall obtain, at its expense, all licenses, permits, insurance and governmental approvals, if any, necessary for the performance of its obligations under this Contract.

II. Civil Rights Requirements - 29 U.S.C. § 62, 42 U.S.C. § 2000, 42 U.S.C. § 602, 42 U.S.C. § 12112, 42 U.S.C. § 12132, 49 U.S.C. § 5332¹

A. Nondiscrimination

In accordance with Title VI of the Civil Rights Act, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and all other provisions of federal law, CONTRACTOR agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, CONTRACTOR agrees to comply with applicable federal implementing regulations. The clauses of Appendix A and E of the U.S. DOT Standard Title VI Assurances (USDOT 1050.2A) are

¹ All references to statutes and regulations include any amendments to present.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

incorporated herein by reference.

- B. **Equal Employment Opportunity**. The following equal employment opportunity requirements apply to the underlying Contract:

1. Race, Color, Creed, National Origin, Sex

In accordance with Title VII of the Civil Rights Act, 42 U.S.C. § 2000e, CONTRACTOR agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq. (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable federal statutes, executive orders, regulations, and federal policies that may in the future affect activities undertaken in the course of this PROJECT. CONTRACTOR agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, CONTRACTOR agrees to comply with apprenticeship. In addition, CONTRACTOR agrees to comply with any implementing requirements the funding federal agency may issue.

2. Age

In accordance with section 4 of the Age Discrimination in Employment Act of 1967, 29 U.S.C. § 623 and other applicable law, CONTRACTOR agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, CONTRACTOR agrees to comply with any implementing requirements the funding federal agency may issue.

3. Disabilities

In accordance with section 102 of the Americans with Disabilities Act, , 42 U.S.C. § 12112, CONTRACTOR agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, CONTRACTOR agrees to comply with any implementing requirements the funding federal agency may issue.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

- C. CONTRACTOR also agrees to include these requirements in each subcontract financed in whole or in part with federal assistance, modified only, if necessary, to identify the affected parties.

III. DBE Assurance

- A. CONTRACTOR or its SUBCONTRACTOR(s) shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. CONTRACTOR shall carry out applicable requirements of 49 CFR part 26 in the award and administration of this Contract.
- B. CONTRACTOR is required to make a good faith effort to include disadvantaged Business Enterprises (DBE) in its work under this Contract.
- C. Failure by CONTRACTOR to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as COG deems appropriate, which may include, but is not limited to:
 - (1) Withholding monthly progress payments;
 - (2) Assessing sanctions as set forth in the CONTRACT;
 - (3) Liquidated damages which will be spelled out in the CONTRACT; and/or
 - (4) Disqualifying the CONTRACTOR from future bidding as non-responsible.

IV. Responsibility of CONTRACTOR

- A. CONTRACTOR shall perform the services with the standard of care, skill, and diligence normally provided by a contractor in the performance of services similar to the services hereunder.
- B. Notwithstanding any review, approval, acceptance, or payment for the services by COG, CONTRACTOR shall be responsible for the professional and technical accuracy of its work, design, drawings, specifications, and other materials furnished by CONTRACTOR under this Contract.
- C. If CONTRACTOR fails to perform the services, or any part of the services, in conformance with the standard set forth in subparagraph A above, it shall, if required by COG, perform at its own expense and without additional cost to COG, those services necessary for the correction of any deficiencies or damages resulting, in whole or in part, from CONTRACTOR's failure. This obligation is in addition to and not in substitution for any other remedy available to COG under the "Remedies" paragraph, or otherwise available by law.

V. Governing Law

This Contract shall be governed by and construed in accordance with the laws of the District of Columbia without regard to principles of conflicts of law.

VI. Indemnification

- A. CONTRACTOR shall protect, hold free and harmless, defend and indemnify COG from all liability, penalties, costs, losses, damages, expenses, causes of action, claims, or judgments (including attorney's fees) resulting from injury to, or death of, any person or damage to

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

property of any kind, which injury, death or damage arises out of, or is in any way connected with the performance of the work or failure to perform its obligations under this Contract.

- B. This obligation of indemnification shall apply to any acts or omissions, negligent conduct, whether active or passive, including acts or omissions of CONTRACTOR's agents or employees; except that it shall not be applicable to injury, death, or damage to the property arising from the sole negligence of COG, its officers, agents, and employees.

VII. Force Majeure

- A. Neither COG nor CONTRACTOR shall be held responsible for delay or default caused by fire, riot, acts of God, declaration of emergency, or war where such cause was beyond, respectively, COG's or CONTRACTOR's reasonable control. COG and/or its members and CONTRACTOR shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.
- B. The party claiming force majeure must give of its claim to the other party within 5 working days.

VIII. Independent CONTRACTOR

- A. CONTRACTOR shall perform the work required by this Contract as an "Independent Contractor." Although COG reserves the right to determine the delivery schedule for the work to be performed and to evaluate the quality of the completed performance, COG cannot and will not control the means or manner of CONTRACTOR's performance. CONTRACTOR shall comply promptly with any requests by COG relating to the emphasis or relative emphasis to be placed on various aspects of the work or to such other matters pertaining to the work under this Contract. CONTRACTOR is responsible for determining the appropriate means and manner of performing the work.
- B. CONTRACTOR represents and warrants that CONTRACTOR is not an employee of COG, is not currently employed by the Federal Government, and is not an officer, employee, or agent of COG.
- C. CONTRACTOR shall be responsible for all federal or state taxes applicable to any compensation or payments paid to CONTRACTOR under this Contract. CONTRACTOR is not eligible for any federal Social Security, unemployment insurance, or workers' compensation benefits from compensation or payments paid to CONTRACTOR under this Contract.
- D. CONTRACTOR agrees to immediately provide COG notice of any claim made against CONTRACTOR by any third party. CONTRACTOR also agrees not to assign to any third party, without COG's written consent, any obligation of COG to indemnify CONTRACTOR for any actions under this Contract.

IX. Insurance Requirements

- A. CONTRACTOR shall obtain, and at all times keep in effect, Commercial General Liability Insurance in the amounts listed below for its activities and operations. The insurance shall include coverage for personal injury, discrimination, and civil rights violation claims. All such

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

insurance shall name COG as ADDITIONAL INSURED. A copy of the certificate of insurance shall be filed with COG prior to the time any services are rendered. CONTRACTOR shall maintain coverage in the amount of \$1,000,000 per occurrence and \$2,000,000 general aggregate and \$500,000 for property damage. Coverage shall be written on an occurrence form (Accord Form).

- B. CONTRACTOR shall obtain, and at all times keep in effect, automobile insurance on all vehicles used in this Contract with COG to protect CONTRACTOR against claims for damages resulting from bodily injury, including wrongful death, and property damage that may arise from the operations of any owned or hired automobiles used by CONTRACTOR in connection with the carrying out of this Contract. All such insurance shall name COG and/or individual members, their employees, and agents as ADDITIONAL INSURED.
- C. CONTRACTOR shall, upon request, provide COG with certification of Workers' Compensation Insurance, with employer's liability in the minimum amount required by the governing jurisdiction's law in effect for each year of this Contract.
- D. CONTRACTOR shall obtain and maintain at all times during the prosecution of the work under this Agreement professional liability insurance. Limits of liability shall be \$1,000,000 per claim and \$2,000,000 aggregate.
- E. All insurance policies shall have a minimum 30 days' notice of cancellation. Immediate written notice to COG and members involved in the Contract shall be required in the event of cancellation or restriction by the insurance company of any insurance policy referred to in this section.
- F. When insurance coverage is renewed, CONTRACTOR shall provide new certificates of insurance prior to expiration of current policies to all participating agencies.

X. Ownership of Documents and Materials

- A. CONTRACTOR agrees that all documents and materials, including but not limited to, reports, drawings, studies, specifications, estimates, maps, photographs, designs, graphics, mechanicals, artwork, and computations prepared by or for CONTRACTOR under the terms of this Contract shall at any time during the performance of the services be made available to COG upon request and shall become and remain the exclusive property of COG upon termination or completion of the services.
- B. COG and participating jurisdictions shall have the right to use the same without restriction or limitation and without compensation to CONTRACTOR other than that provided in this Contract. COG and/or the participating jurisdiction(s) shall be the owner for the purposes of copyright, patent, or trademark registration.
- C. If CONTRACTOR obtains or uses for purposes of this Contract, or subcontracts for, any design, device, material, or process covered by letters of patent for copyright, it shall provide an assignment to COG and/or its jurisdictional members of ownership for purposes of copyright, patent or trademark and of all right to possess and to use such design, device, material or process and a legally sufficient agreement with the patentee or owner, and a copy of such agreement shall be filed with COG and/or its members.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

- D. CONTRACTOR shall indemnify and hold harmless COG from any and all claims for infringement by reason of the use of any such patented design, device, materials, or process, or any trademark or copyright, and shall indemnify, protect, and save harmless COG, its officers, agents, and employees with respect to any claim. Actions for costs or infringement, for royalties or user fees, arising out of purchase or use of materials, construction, supplies, equipment, or services are covered by this provision.

XI. Access to Records and Reports

- A. CONTRACTOR shall maintain all fiscal records relating to this Contract in accordance with generally accepted accounting principles. In addition, CONTRACTOR shall maintain any other records pertinent to this Contract in such a manner as to clearly document CONTRACTOR's performance hereunder.
- B. CONTRACTOR acknowledges and agrees that COG and its duly authorized representatives shall have access to such fiscal records and all other books, documents, papers, plans, and writings of the CONTRACTOR that are pertinent to this Contract. All such fiscal records, books, documents, papers, plans, and writing shall be retained by CONTRACTOR and kept accessible for a minimum of three (3) years, except as required longer by law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy, or litigation arising out of or related to this Contract, whichever date is later.
- C. All subcontracts shall also comply with these provisions.

XII. Invoicing and Payments

- a. Invoices shall be submitted not more than 30 days after the end of the month and, if submitted according to Project and CONTRACT requirements. Payments to the CONTRACTOR pursuant to this CONTRACT shall be made no later than 30 days after COG's receipt of a proper invoice from CONTRACTOR.
- b. Any invoice for work in the fiscal year (FY) must be submitted by CONTRACTOR within 30 days after the end of the COG's June 30 FY.
- c. Payments to CONTRACTOR pursuant to this CONTRACT shall be made no later than 30 days after COG's receipt of a proper invoice from the CONTRACTOR.
- d. Electronic Payment means the payment of money to a vendor by electronic means, including by means of a Purchase Card (P-card) or Automated Clearing House (ACH) funds transfer method.
- e. CONTRACTORS will receive payment from the P-Card in the same manner as other credit card purchases. The payments typically are transferred within 48 hours.
- f. ACH transactions will be acceptable as a form of payment to COG vendors. Please keep in mind the turn-around time on ACH transactions can be as long as 30 days.
- g. Accordingly, SUBRECIPIENTS must presently have the ability to accept these P-Cards or ACH and take whatever steps necessary to implement this ability before the start of the

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

CONTRACT term, or CONTRACT award by the COG. COG reserves the right to revise this program, as necessary.

XIII. Contingent Fee Prohibition

CONTRACTOR, architect or engineer (as applicable) warrants that it has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for CONTRACTOR, architect or engineer, to solicit or secure this Contract, and that it has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee or agent, any commission, percentage, brokerage, or contingent fee or other consideration contingent on the making of this Contract.

XIV. Severability/Waiver

- A. COG and CONTRACTOR agree that, if any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.
- B. The failure of either party to enforce any provision of this Contract shall not constitute a waiver by that party of that or any other provision of this Contract.

XV. Subcontracting or Assignment

The benefits and obligations hereunder shall inure to and be binding upon the parties hereto and neither this Contract nor the services to be performed hereunder shall be subcontracted, or assigned or otherwise disposed of, either in whole or in part, except with the prior written consent of COG. COG have the right to withhold such consent for any reason COG deems appropriate.

XVI. Survival

The terms, conditions, representations, and all warranties contained in this Contract shall survive the termination or expiration of this Contract.

XVII. Breaches and Dispute Resolution

A. Disputes

Disputes arising in the performance of this Contract, which are not resolved by agreement of the parties, shall be decided in writing by the COG Executive Director or his/her designee. This decision shall be final and conclusive, unless within ten (10) working days from the date of receipt of its copy, the CONTRACTOR mails or otherwise furnishes a written appeal to the Executive Director or his/her designee.

In connection with any such appeal, the CONTRACTOR shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the Executive Director or his/her designee shall be final and binding upon the CONTRACTOR, and the

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

CONTRACTOR shall abide by the decision.

B. Performance During Dispute

Unless otherwise directed by COG, the CONTRACTOR shall continue performance under this Contract while matters in dispute are being resolved.

C. Claim for Damages

Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of its employees, agents, or others for acts it is legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

XVIII. Remedies

A. Corrections of errors, defects, and omissions

CONTRACTOR agrees to perform the work as may be necessary to correct errors, defects, and omissions in the services required under this Contract, without undue delays and without cost to COG. The acceptance of the work set forth herein by COG shall not relieve CONTRACTOR of the responsibility of subsequent corrections of such errors.

B. Set Offs

COG may deduct from and set-off against any amounts due and payable to CONTRACTOR any back-charges, penalties, or damages sustained by COG, their agents, employees of recipients of its services, by virtue of any breach of this Contract by CONTRACTOR or by virtue of the failure or refusal of CONTRACTOR to perform the services or any part of the services in a satisfactory manner. Nothing herein shall be construed to relieve CONTRACTOR of liability for additional costs resulting from a failure to satisfactorily perform the services.

C. Cumulative

All rights and remedies of COG/and its participating members and CONTRACTOR shall be cumulative and may be exercised successively or concurrently. The foregoing is without limitation to or waiver of any other rights or remedies of COG by law.

XIX. Termination

A. If CONTRACTOR fails to fulfill its obligations under the Contract properly and on time, or otherwise violates any provision of the Contract, COG may terminate the Contract by written notice to CONTRACTOR.

B. The notice shall specify the acts or omissions relied upon as cause for termination.

C. All finished or unfinished work provided by CONTRACTOR shall, at COG's option, become COG's and/or member's property. COG shall pay the CONTRACTOR fair and equitable compensation for satisfactory performance prior to receipt of notice of termination, less the

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

amount of damages caused by CONTRACTOR's breach. If the damages are more than the compensation payable to the CONTRACTOR, CONTRACTOR will remain liable after termination and COG can affirmatively collect damages.

XX. Termination of Contract for Convenience

- A. The performance of work under this Contract may be terminated by COG, in whole or in part, upon written notice to CONTRACTOR, when COG determines such termination is in the best interest of COG. The termination for convenience is effective on the date specified in COG's written notice.
- B. COG will pay for all reasonable costs allocable to the Contract for work or costs incurred by CONTRACTOR up to the date of termination. However, CONTRACTOR shall not be reimbursed for any anticipatory profits that have not been earned up to the date of termination.

XXI. Termination of Multi-Year Contract

- A. If COG fail to appropriate funds or if funds are not otherwise made available for continued performance for any fiscal period of this Contract succeeding the first fiscal period, this Contract shall be cancelled automatically as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either COG's and/or participating members rights or the CONTRACTOR's rights under any termination clause in this Contract.
- B. The effect of termination of the Contract hereunder will be to discharge both CONTRACTOR and COG from future performance of the Contract, but not from their rights and obligations existing at the time of termination. CONTRACTOR shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the Contract. COG shall notify CONTRACTOR as soon as it has knowledge that funds may not be available for the continuation of this Contract for each succeeding fiscal period beyond the first.

XXII. Bankruptcy

Upon filing for any bankruptcy proceeding by or against CONTRACTOR, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assignee for the benefit of creditors, CONTRACTOR must notify COG immediately. Upon learning of the actions herein identified, COG reserves the right at its sole discretion either to cancel/terminate the Contract or to affirm the Contract and hold CONTRACTOR responsible for damages. The exercise of this right is in addition to any other rights COG may have as provided in this Contract or by law.

XXIII. Time is of the Essence

Time is of the essence in CONTRACTOR's performance of each and every obligation and duty under this Contract.

XXXIV. Entire Contract

This Contract constitutes the complete and exclusive statement of the Contract between the parties relevant to the purpose described herein and supersedes all prior agreements or proposals, oral or written, and all other communication between the parties relating to the subject matter of this

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Contract.

In the event of a conflict between or among any of the terms, conditions, and requirements applicable to this Contract, the conflict shall be resolved by giving weight in accordance with the following priorities, in the order as stated below:

1. Terms and conditions of any grant that provides funding for this Contract, in whole or in part;
2. Terms and conditions set forth or referenced within this Contract;
3. Terms and conditions and representations set forth or referenced within Attachments A and F to this Contract;
4. Terms, conditions, specifications, and requirements set forth within any solicitation (e.g., RFP or IFB) pursuant to which this Contract was awarded;
5. Offers, representations, promises, terms, and conditions set forth with the bid or proposal submitted in response to any solicitation (e.g., RFP or IFB) pursuant to which this Contract was awarded.

(Revised 3/14/2024)

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

ATTACHMENT B: PROPOSERS EXPERIENCE/REFERENCES

Name of Proposer _____

The Proposer, for itself and for any Subcontractors, must provide a list, as well as references, of similar work completed or in progress for other clients. Preferred references will be from recent work, conducted within the last five years. References shall include complete contact information. Names, titles, addresses, and telephone numbers shall be included for each reference. References must include work in which key personnel proposed to COG for this project have served.

A Proposer, which, in the sole judgment of COG, lacks sufficient specific experience, may be deemed non-responsible, and may not be considered for award of subsequent contract(s)

1) Firm Name _____

Contact Name _____

Address _____

Telephone Number _____ Email Address _____

2) Firm Name _____

Contact Name _____

Address _____

Telephone Number _____ Email Address _____

3) Firm Name _____

Contact Name _____

Address _____

Telephone Number _____ Email Address _____

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

ATTACHMENT C: NON-COLLUSION AFFIDAVIT

DATE _____

TO: Metropolitan Washington Council of Governments,
777 North Capitol Street, NE, Suite 300
Washington, DC 20002

To Whom It May Concern:

This is to certify that the undersigned bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this Proposal submitted to the Metropolitan Washington Council of Governments & Mid-Atlantic Purchasing Team.

In addition, the bidder also certifies that they are in good standing and not on any debarred lists with any government agency including Local, Federal and State Governments.

Proposer _____

Signature

Title of Authorized Representative

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

ATTACHMENT D: DBE PLAN SUBMISSION

DBE Participation YES ____ NO ____ (Please Check One)

PROPOSER	Name: _____	
Total Proposed Budget	Value: \$ _____	
DBE Plan	Yes ____ No ____	
Check if Prime Contractor is a DBE ____ . Certification Form Must Be Attached to this form.	Certification # _____	Expiration Date: _____
DBE Certification	State: _____	Certification Type: DBE (must be DBE)
	Certifying Agency: _____	

DBE SUBCONTRACTOR 1	Name: _____	
Street Address		Tax ID #: _____
City, State, Zip		Website: _____
POINT OF CONTACT	Name: _____	Title: _____
	Email: _____	Telephone: _____
Subcontract Value	Cost \$ _____	Percentage of total ____%
DBE Performance Period	Start ____/____/____	End ____/____/____
DBE Certification	State: _____	Certification Type: DBE (must be DBE)
	Certifying Agency: _____	
Certification Form Must Be Attached to this form	Certification # _____	Expiration Date: _____

Copy for additional DBE subcontractors

DBE SUBCONTRACTOR 2	Name: _____	
Street Address		Tax ID #: _____
City, State, Zip		Website: _____
POINT OF CONTACT	Name: _____	Title: _____
	Email: _____	Telephone: _____

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Subcontract Value	Cost \$ _____	Percentage of total _____%
DBE Performance Period	Start ____/____/____	End ____/____/____
DBE Certification	State: _____	Certification Type: DBE (must be DBE)
	Certifying Agency: _____	
Certification Form Must Be Attached to this form	Certification # _____	Expiration Date: _____

Copy for additional DBE subcontractors

DBE SUBCONTRACTOR 3	Name: _____	
Street Address	_____	Tax ID #: _____
City, State, Zip	_____	Website: _____
POINT OF CONTACT	Name: _____	Title: _____
	Email: _____	Telephone: _____
Subcontract Value	Cost \$ _____	Percentage of total _____%
DBE Performance Period	Start ____/____/____	End ____/____/____
DBE Certification	State: _____	Certification Type: DBE (must be DBE)
	Certifying Agency: _____	
Certification Form Must Be Attached to this form	Certification # _____	Expiration Date: _____

Copy for additional DBE subcontractors

DBE SUBCONTRACTOR 4	Name: _____	
Street Address	_____	Tax ID #: _____
City, State, Zip	_____	Website: _____
POINT OF CONTACT	Name: _____	Title: _____
	Email: _____	Telephone: _____
Subcontract Value	Cost \$ _____	Percentage of total _____%
DBE Performance Period	Start ____/____/____	End ____/____/____
DBE Certification	State: _____	Certification Type: DBE (must be DBE)
	Certifying Agency: _____	

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

**Certification Form Must Be
Attached to this form**

Certification # _____

Expiration Date: _____

Copy for additional DBE subcontractors

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

ATTACHMENT E: COOPERATIVE PURCHASING PROGRAM RIDER CLAUSE

The COG Cooperative Purchasing Program works to aggregate the public entity and non-profit purchasing volumes in the National Capital Region of Maryland, Virginia and Washington, D.C.

I. Format

COG serves as the Lead Agency of this procurement and has included this Cooperative Rider Clause indicating its willingness to allow other public entities to participate in this procurement ("Participating Agency") pursuant to the following Terms and Conditions:

II. Terms

- A. A Participating Agency, through their use of this Cooperative Rider Clause, agree to the terms and conditions of the resulting contract to the extent that they can be reasonably applied to the Participating Agency.
- B. A Participating Agency may also negotiate additional terms and conditions specific to their local requirements upon mutual agreement between the parties.

III. Other Conditions - Contract and Reporting

- A. The resulting contract shall be governed by and "construed" in accordance with the laws of the State/jurisdiction in which the Participating Agency is officially located.
- B. Contract obligations rest solely with the Participating Agency only.
- C. Contractor must provide semi-annual contract usage reporting information to COG, including but not limited to quantity, unit pricing and total volume of sales by entity on demand and without further approval of Participating Agency:

Semi-annual reporting Due Dates beginning from Contract execution:

- November 30, covering May 1 – October 31
 - May 31, covering November 1 – April 30
- D. Contractor is required to report any Participating Agency that is added to the contract and a **COG Rider Clause Approval Form** must be filled out by the Participating Agency and approved by COG (see form below).
- E. Contractor must provide to COG a semi-annual administrative fee of two percent (2.0%) on all gross invoices at the time of the semi-annual report submission due dates listed above.
- F. Significant changes in total contract value may result in further negotiations of contract pricing with the Lead Agency and any Participating Agency.
- G. Although Participating Members (see next page) are the priority of this rider clause, organizations not on this list are permitted to use this clause by mutual agreement and approval by COG.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

II. Participating Members

COG Member Governments

- **District of Columbia**

- **Maryland**

- Town of Bladensburg
- City of Bowie
- City of College Park
- Charles County
- City of Frederick
- Frederick County
- City of Gaithersburg
- City of Greenbelt
- City of Hyattsville
- City of Laurel
- Montgomery County
- Prince George's County
- City of Rockville
- City of Takoma Park

- **Virginia**

- City of Alexandria
- Arlington County
- City of Fairfax
- Fairfax County
- City of Falls Church
- Loudoun County
- City of Manassas
- City of Manassas Park
- Prince William County

- **Other Local Governments**

- Town of Herndon
- Spotsylvania County
- Stafford County
- Town of Vienna

- **Public Authorities/Agencies**

- Alexandria Renew Enterprises
- District of Columbia Water and Sewer Authority
- Metropolitan Washington Airports Authority
- Montgomery County Housing Opportunities Commission

- Potomac & Rappahannock Transportation Commission/ Omni Ride
- Prince William County Service Authority
- Upper Occoquan Service Authority

- Washington Metropolitan Area Transit Authority
- Washington Suburban Sanitary Commission

- **School Systems**

- Alexandria Public Schools
- Arlington County Public Schools
- Charles County Public Schools
- District of Columbia Public Schools
- Frederick County Public Schools
- Loudoun County Public Schools
- City of Manassas Public Schools
- Montgomery College
- Montgomery County Public Schools
- Prince George's County Public Schools
- Prince William County Public Schools
- Spotsylvania County Schools

- **State Agencies**

- Maryland-National Capital Park and Planning Commission

BALTIMORE METROPOLITAN COUNCIL

- City of Annapolis
- Anne Arundel County
- Anne Arundel County Public Schools
- Anne Arundel Community College
- City of Baltimore
- Baltimore City Public Schools
- Baltimore County
- Baltimore County Public Schools
- Community College of Baltimore County
- Carroll County
- Harford County
- Harford County Public Schools

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

- Harford Community College
- Howard County
- Howard County Public Schools System
- Howard Community College
- Queen Anne's County
- Queen Anne's County Public School

**COG Rider Clause
Approval Form**

This form must be executed for any Participating Agency, both within and outside of the Metropolitan Washington Council of Governments (COG) region, to use the COG Cooperative Rider Clause to ride solicitations and contracts.

NOTE: Effective January 1, 2019, COG does not authorize the use of the MAPT/COG Cooperative Rider Clause without this form being completed and approved.

Participating Agency Name _____

Contact Person _____

Phone _____ Email Address _____

Solicitation/Contract Information:

Name Solicitation/Contract _____

Lead Agency/Contract Holder _____

Contact Person _____

Solicitation/Contract Number _____ Other Reference _____

Vendor Information:

Contractor Name _____

Address _____

City/State/Zip _____

Contact Person _____

Phone _____ Email Address _____

See questions on next page.

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
RFP 25-009 REGIONAL HOUSEHOLD TRAVEL SURVEY

Questions –

YES **NO**

- | | | |
|---|-------|-------|
| 1. Is the Contract active and currently in force? | _____ | _____ |
| 2. Is the Participating Agency's specifications/scope of work the same or very similar to that in the Contract? | _____ | _____ |
| 3. Is riding this Contract within the rules and regulations of the Participating Agency and approved by the Participating Agency's Purchasing Department? | _____ | _____ |

Participating Entity

**Metropolitan Washington
Council of Governments**

Name _____

Name _____

Title _____

Title _____

Signature _____

Signature _____

2017/2018 REGIONAL TRAVEL SURVEY

Technical Documentation

An overview of the technical approach to the Regional Travel Survey. After a brief overview of the survey methodology, this document is focused on post-survey data processing and survey expansion. Appendices contain more information about the survey methodology as well as file format and file frequency tables.

January 2021



National Capital Region
Transportation Planning Board

2017/2018 REGIONAL TRAVEL SURVEY - TECHNICAL DOCUMENTATION

January 2021

ABOUT THE TPB

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

CREDITS

Contributing Editors: Kenneth Joh, Senior Statistical Survey Analyst; Nicole McCall, Manager, Planning Research and Assistance; and Timothy Canan, Planning Data and Research Program Director

Technical Support for post-survey data processing: Yu Gao, TPB Transportation Engineer; Wanda Owens, TPB Transportation Engineer

SPECIAL THANKS

Staff gratefully acknowledges the support, guidance, and mentorship of our independent Senior Advisor and former staff member, Robert Griffiths.

ACCOMMODATIONS POLICY

Alternative formats of this document are available upon request. Visit www.mwcog.org/accommodations or call (202) 962-3300 or (202) 962-3213 (TDD).

TITLE VI NONDISCRIMINATION POLICY

The Metropolitan Washington Council of Governments (COG) fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations prohibiting discrimination in all programs and activities. For more information, to file a Title VI related complaint, or to obtain information in another language, visit www.mwcog.org/nondiscrimination or call (202) 962-3300.

El Consejo de Gobiernos del Área Metropolitana de Washington (COG) cumple con el Título VI de la Ley sobre los Derechos Civiles de 1964 y otras leyes y reglamentos en todos sus programas y actividades. Para obtener más información, someter un pleito relacionado al Título VI, u obtener información en otro idioma, visite www.mwcog.org/nondiscrimination o llame al (202) 962-3300.

TABLE OF CONTENTS

INTRODUCTION	1
SURVEY METHODOLOGY	2
Overview	2
POST-SURVEY DATA PROCESSING	4
Data Processing Scope	4
Household File Edits	6
Person File Edits	6
Vehicle File Edits	7
Trip File Edits	7
SURVEY EXPANSION	17
Weighting of the 2017-2018 RTS	17
Initial Survey Weights	17
Household Size Adjustment for TPB Member Jurisdictions	18
TPB Modeled Area “Overlap Jurisdictions”	18
TPB Modeled Area “Outer County” Jurisdictions	19
Worker Workplace/Metrorail Adjustment Factor	20
PUBLIC RELEASE FILES	24
Which Weight to Use?	24
Merging Data from Multiple Files	25
"MPO" Variables	25
Frequency Tables	25
APPENDICES	
APPENDIX A - RSG REGIONAL TRAVEL SURVEY FINAL REPORT	A-1
APPENDIX B - HOUSEHOLD FILE FORMAT	B-1
APPENDIX C - PERSON FILE FORMAT	C-1
APPENDIX D - VEHICLE FILE FORMAT	D-1

APPENDIX E - TRIP FILE FORMAT	E-1
APPENDIX F - HOUSEHOLD FILE FREQUENCIES	F-1
APPENDIX G - PERSON FILE FREQUENCIES	G-1
APPENDIX H - VEHICLE FILE FREQUENCIES	H-1
APPENDIX I - TRIP FILE FREQUENCIES	I-1

INTRODUCTION

In fulfilling its role as the Metropolitan Planning Organization (MPO) for the Washington, DC region, the National Capital Region Transportation Planning Board (TPB) at the Metropolitan Washington Council of Governments (COG) has conducted a regional household travel survey approximately every ten years since 1968. The survey, which collects demographic and travel information from a randomly selected representative sample of households in the TPB region and adjacent areas, is the primary source of observed data used to estimate, calibrate, and validate the regional travel demand model. The model in turn is used for the travel forecasting and air quality conformity analysis of the region's long-range transportation plan as well as to support other key program activities. The survey data are also used by staff to analyze regional travel trends, and by TPB member jurisdictions and agencies to inform regional and sub-regional transportation studies and to conduct their own analysis for their areas of interest. The purpose of the survey is to better understand the characteristics of the households and persons in the region and to better understand daily travel and activities: how we travel, why we travel, where we go, how long it takes us, and what we do when we arrive. The survey seeks to obtain a complete picture of travel patterns in the region. As a result, the regional household travel survey is a critical and essential element of the TPB work program.

From October 2017 through December 2018, the Regional Travel Survey (RTS) collected information on demographic and travel behavior characteristics of persons living in households in the metropolitan Washington region and adjoining jurisdictions. Under the oversight of COG/TPB, the survey was conducted by a nationally recognized transportation survey research firm, Resource Systems Group, Inc. (RSG). Previous COG/TPB regional household surveys for the Washington area were conducted in 1968, 1987/1988, 1994, and 2007/2008.

This document describes the technical approach used for the RTS. It provides a brief overview of the survey methodology. Additional information about the survey methodology, including the questionnaire design, survey sampling, survey administration, targeted outreach, and survey response can be found in the final report prepared by RSG (Appendix A). Due to the complexity of multi-modal travel patterns in the National Capital Region, review and editing of the RTS data files was performed internally by staff familiar with travel patterns in the region. This report is primarily focused on the post-survey data processing and survey expansion performed by COG/TPB staff. Appendices also contain file format and file frequency tables for the final public release files.

SURVEY METHODOLOGY

Overview

The 2017/2018 RTS aimed to recruit a random sample of 15,000 households across all 23 TPB member jurisdictions and neighboring jurisdictions to complete a one-day survey of their daily travel. The RTS used an address-based sample (ABS) for household recruitment that ensured a sufficient number of completed surveys across the entire region, including higher density, mixed-use areas, and Regional Activity Centers, as well as lower density suburban and rural areas. The RTS included several different area types, including TPB jurisdictions inside and outside of Regional Activity Centers, Activity Centers based on an oversample of Arlington County households, and transit and low-income area types from households in Anne Arundel, Howard, and Carroll Counties who participated in the Maryland Travel Survey (MTS). The survey was conducted by RSG with oversight from COG/TPB staff. A comprehensive pre-test of proposed survey protocols for the RTS was conducted in early 2017.

Households randomly selected for this survey were recruited by mail and asked to provide information about their household, their usual travel patterns and the details of all travel by the members of their household on a randomly assigned weekday. Households responded to this survey via a specially designed web-based app or by telephone. A participation incentive in the form of a gift card was provided to all households who completed the survey. Confidentiality was assured to protect the privacy of survey respondents.

The RTS consisted of two key parts: Part 1 featured a recruitment questionnaire, which was completed by households who were invited and agreed to participate in the survey. These households completed the Part 1 questionnaire, which captured information on household, person, and vehicle characteristics as well as new questions on the use of alternative travel options. Approximately 23,000 households completed the recruitment questionnaire for Part 1. Part 2 consisted of a one-day travel diary, which survey participants completed to record details of every trip that household members took on their assigned travel day. Data collected in Part 2 constitutes actual observed trip information that will provide critical input for developing the regional travel demand model. Approximately 16,000 households completed both parts of the survey, well exceeding the survey goal of a representative sample of 15,000 households. Additionally, the RTS collected over 120,000 trip records from these households.

The demographic and travel information collected from the RTS consists of four key files:

1. Household File: characteristics of households, including, among others, household size, income, number of licensed drivers, housing type, and number of vehicles and bicycles.
2. Person File: characteristics of individual persons, including, among others, demographic information, employment status, work location, and usual commute mode.
3. Vehicle File: characteristics of household vehicles, including make, model, year, fuel type, and automatic toll payment transponder information.
4. Trip File: recorded trip details, including origin/destination, start/end times, mode of travel, trip purpose, and transit access and egress.

Information included in the Household, Person, and Vehicle files was obtained from Part 1 (recruitment questionnaire), while information contained in the Trip file was obtained from Part 2 (travel diary).

Additional technical details about the questionnaire design, survey sampling, survey administration, targeted outreach, and survey response can be found in the final report prepared by RSG (Appendix A).

POST-SURVEY DATA PROCESSING

Data Processing Scope

Data collection for the Regional Travel Survey (RTS) was concluded on December 31, 2018, the conclusion of the survey. The survey contractor (RSG) conducted data quality assurance and quality checks during the data collection phase, outlined in more detail in RSG's final report (Appendix A). These activities were closely monitored by COG/TPB staff. Unlike surveys conducted by many MPOs and state DOTs, the post-survey processing, including edits to the RTS data files and survey weighting, was conducted in-house by COG/TPB staff. Because of the complexity of multi-modal travel patterns in the National Capital Region, review and editing of the RTS data files was performed internally by staff familiar with travel patterns in the region.

RSG provided the raw (unedited) data files to COG/TPB staff in March 2019. An initial review of all raw household, person, trip, and vehicle data was conducted by COG/TPB staff in the spring of 2019. This initial review identified a significant number of cases where it was clear that some survey respondents misunderstood or misinterpreted the information that was being requested in certain survey questions, especially those relating to travel modes used and trip purpose. The reasons for these misunderstanding largely stemmed from the fact that the RTS was conducted primarily as a web-based survey and the responses obtained were based on respondent self-reporting without assistance from trained survey interviewers. Compared with the 2007/2008 Household Travel Survey (HTS) which was a telephone survey that utilized trained interviewers, the raw data was "messier" and required more extensive data processing. Editing the travel day diary information, which contained detailed trip records for each household member, was particularly labor-intensive because trip records needed to be reviewed and validated for logical consistency with other survey responses. Reported non-SOV (single occupancy vehicle) trips including trips by public transit, walk, bicycle, and taxi/ride-hail were manually reviewed and edited to ensure consistency in the responses to the travel modes and destination activity purpose survey questions. Drive alone trips were checked using automated logic and statistical programming routines for efficiency.

The interim RTS data files were stored on secure servers housed at COG/TPB. To protect confidentiality, a limited number of staff who would assist in data editing were granted file access permission to the RTS data files, and they were required to sign a confidentiality agreement. The public use version of the RTS does not contain sensitive and confidential information such as X/Y coordinates for home, work, and school locations, in addition to other origin and destination locations.

COG/TPB staff developed a scope of RTS data processing (see Table 1). The major processing tasks included editing the household and person files, calculating the initial household weights and comparing the initial weighted person characteristics with the Census Bureau's American Community Survey (ACS), and editing the trip file and calculating the initial trip weights. The final steps involved appending records from the Maryland Travel Survey (MTS) for Anne Arundel, Howard, and Carroll Counties that overlap with the Baltimore Metropolitan Council (BMC) planning area and preparing the final weights for the TPB Modeled Area.

Table 1: RTS Major Processing Tasks

Task No.	Task
1	Household File Edits <ul style="list-style-type: none"> Identified and reconciled any mismatches between the addresses in the sample file and addresses provided by the respondent Edit “other, please specify” responses Update missing housing type responses
2	Calculate Initial Household Weights <ul style="list-style-type: none"> Review responses by strata and collapse if necessary, if too few responses Calculate initial household weights based on probability of selection for recruited households Review range of weights by strata to see if further collapsing may be necessary and recalculate initial household weights as required
3	Person File Edits <ul style="list-style-type: none"> Edit “other, please specify” responses for relationship, race, school mode, travel day start and end locations, and no travel on travel day
4	Comparing Initial Weighted Person Characteristics with Census ACS <ul style="list-style-type: none"> Apply initial household weights to person file Compare weighted person characteristics with 1-year 2017 ACS PUMS Determine and make any needed adjustments Tabulate weighted household and person files
5	Trip File Edits <ul style="list-style-type: none"> Edit “other, please specify” responses for destination activity, mode other vehicle, subway access/egress mode, transit access/egress mode, school bus access/egress mode, school bus exit location Add “missed trips” to trip file Add “trip purpose” categories to trip file based on primary destination activity Review trip origin/destination geocoding and assign jurisdiction and TAZ codes Determine primary and secondary modes for transit and carpool trips Delete households with “non-correctable” trip edits Perform trip linking of the trip file data
6	Calculate Initial Trip Weights <ul style="list-style-type: none"> Calculate initial trip weights based on probability of selected for edited complete households Apply household/person-level bias adjustments as necessary
7	Add-In Maryland Travel Survey (MTS) Data <ul style="list-style-type: none"> Review household, person, trip, and vehicle files for Anne Arundel, Carroll, and Howard Counties (“overlap jurisdictions”) Recode the structure of the MTS data files to match the RTS data files Edit MTS data files as required Recalculate complete household survey weights Coordinate with Baltimore Metropolitan Council (BMC) and MTS consultant
8	Prepare Final Weighted File and Documentation for TPB Modeled Area <ul style="list-style-type: none"> Perform final survey data edits Calculate final survey data weights

	<ul style="list-style-type: none"> • Perform consistency checks • Prepare public release file • Prepare technical documentation
--	--

Household File Edits

The first major processing task was editing the household file. As an initial check, COG/TPB staff matched the sample address file from MSG, the Address Based Sampling (ABS) vendor, with the home addresses provided by the respondent in the RTS household interview. The following general rules were applied to determine address selection: 1) If both the MSG provided address and the address provided by the respondent were the essentially the same, including a few cases where the respondent did not provide an apartment number, the MSG address with the apartment number was selected as the household address; 2) If the respondent provided address was different from the MSG provided address, Google Maps was used to verify the respondent provided address and, if verified as a valid residential address, the respondent provided address was selected as the household address; 3) In a very few cases where the Google Map review found that the respondent provided address was not a residential address, the MSG address was selected as the household address. After determining which address to select, COG/TPB staff updated the home addresses for each household in the household file.

Other edits to the household file included updating the missing housing type responses and editing the “other, please specify” responses for home ownership. Housing types for households who did answer this survey interview question were ascertained from the review of MSG and household respondent home addresses. The housing type and home ownership edits were incorporated into the updated household file using statistical programming routines.

Person File Edits

DEMOGRAPHIC AND SCHOOL/WORKPLACE EDITS

The person file included several data items that required editing and recoding. There were several person-level questions on the survey that included “other, please specify” responses. These included the questions about relationship to other household members, race/ethnicity, and typical mode to school. These open-ended responses were recoded to other categories; responses that did not correspond with any categories were aggregated as “other”. For example, there were many open responses for race/ethnicity, which required careful editing and recoding given the complexity of personal identity. In addition to the recoding of “other, please specify” responses, the geocoding of school and workplace locations were reviewed and checked, and these locations were assigned jurisdictions and TAZ codes.

TRAVEL DAY EDITS

The RTS included the travel day diary questionnaire in which each member of the household reported all trips taken on their randomly assigned travel day. This travel day began at 3 AM on the travel day and ended at 3 AM the following day. Most survey participants started and ended their

travel day at home, but there were some participants that did not start and/or end their travel day at home. If the respondent did not start or end at home, the survey asked respondents to specify the location of the place. These open responses were recoded to standard origin activity and destination activity codes in the trip file.

Some RTS participants reported that they did not make any trips on their travel day and there was a survey question which asked the primary reason for not making any trips on their travel day. In addition to the standard response options provided for this question (e.g., worked from home, took the day off, no household vehicle available) there was an “other reason, please specify” option. Because there were so many open-ended responses that could be grouped together and categorized into meaningful reasons for no travel on the travel day (e.g., baby or child under 5 at home all day, inclement weather, out of town) these open-ended responses were recoded into newly created categories that were not initially included as response options to this survey question.

Vehicle File Edits

The vehicle file is not as critical as the household, person, and trip files for regional travel demand modeling and forecasting. However, there were some data items that included open responses that required recoding, including body type (other), vehicle make (other), vehicle model (other), and fuel type (other). Household weights were later added to the vehicle file after the survey data was expanded.

Trip File Edits

The trip file edits were the most complex and involved among the four RTS data files (household, person, vehicle, trip) and were conducted in multiple steps. COG/TPB staff started by editing and recoding various open-ended survey responses similarly to that performed for the household and person files. Upon completion of these edits, a statistical program was run to combine multi-modal unlinked trip legs into a single purpose linked trip record. After the linking of these trip records reasonableness checks were performed to ensure that the individual trip leg components were properly linked and to identify other possible errors such as missing trip segment sequences. These steps are described in the following sections.

RECODING OF “OTHER” VARIABLES

The trip file included several data items that required editing and recoding to consistent standard response options. There were several questions on the travel day diary portion of the survey that included “other, please specify” responses that required editing and recoding. These included questions about destination activities (primary and secondary activities), travel mode (other vehicle), subway access/egress mode (other), transit access/egress mode (other), and school bus access/egress (other). School bus boarding and exiting locations also had an open response option that required recoding.

ADDING MISSED TRIPS AND PURPOSE VARIABLES

The survey provided respondents an opportunity to add “forgotten” or “missed” trips that they did not initially include in the travel day roster at the beginning of the travel diary portion of the survey. These trips had to be manually added to the trip file. In addition, origin and destination purpose variables were added to the trip file based on groupings of primary activities at the origin and destination. The purpose variables grouped detailed activities into broader purpose categories. These broader origin and destination trip purpose categories are discussed in the Trip Purpose Categories section.

MODAL EDITS

The survey collected detailed information on the reported travel modes used by household members on their assigned travel day. Because these travel modes were self-reported, it was imperative to check that respondents had selected the appropriate travel modes for their travel day trips. Previous experience has shown that many travel survey respondents do not make distinctions between various travel modes in the ways that transportation planners would like. This is especially true for various public transit modes. In the initial review of the trip file, it was discovered that some respondents reported Metrorail trips as Commuter Rail, Light Rail, or Inter-city Railroad trips and vice versa. The same is true for Commuter Bus, Express Bus, Local Bus, Paratransit, and Shuttle Bus travel modes. Distinctions between Automobile travel modes are less of a problem. Hence, COG/TPB staff focused their modal edits efforts on non-automobile modes such as rail, bus, walk, and bicycle. These edits were conducted manually in trip edit files created for each mode. These travel modes include the following:

- Rail transit (commuter rail, subway)
- Bus transit (local bus, express bus, paratransit)
- Non-motorized (walk, bicycle)
- Taxi, ride-hailing
- Automobile (drive alone, drive others, auto passenger)
- Other modes

Public Transportation Trips (Rail and Bus)

In performing modal edits COG/TPB staff reviewed all reported public transportation trips to ensure that were coded to their correct type of transit vehicle. All commuter rail and commuter bus trips were checked to make sure they were not really Metrorail or local bus trips or vice versa. For example, all trip records for survey respondents reporting use of commuter rail were checked to see that these respondents reported boarding and alighting their commuter rail train at verifiable commuter rail stations as opposed to a Metrorail station or some other transit stop. Similarly, trip records of respondents reporting use of Metrorail were checked to see that these reported trips began and ended at verifiable Metrorail stations. Trip records of respondents reporting use of commuter and local buses were checked to see that properly coded bus stops were coded on both ends of their trip. Incorrectly coded transit modes were corrected as required.

The modal edits also checked all reported public transportation trips to ensure that they included properly coded access and egress modes to the transit vehicle used. It was found that many

Metrorail trips had missing modes of access or egress mode. For example, a respondent may have reported a walk trip from home to the Capitol South Metrorail station, a change of mode (from walk to Metrorail) trip purpose at the Capitol South station and then a trip to work at the Pentagon. This respondent inadvertently left out the change of mode (from Metrorail to walk) and the walk egress from the Pentagon Metrorail station to the Pentagon. To correct this omission the unlinked survey trip records for this respondent were edited to report a Metrorail trip from the Capitol South Metrorail Station to the Pentagon Metrorail station, a change of mode trip purpose at the Pentagon Metrorail Station and walk egress trip from the Pentagon Metrorail station to the Pentagon. This was done so that when the trip linking program was run for this respondent, the unlinked trip sequence would become a linked home to work Metrorail trip from a Capitol Hill residence to the Pentagon with a walk mode of access and walk mode of egress to Metrorail. Many such missing modes of access and egress trips to transit were added to the unlinked survey trip file to ensure that all legs of trips by transit were properly coded.

Non-Motorized Trips (Walk and Bicycle)

In addition to public transportation trips, COG/TPB staff reviewed all walk and bicycle trips. There were over 20,000 walk trips and nearly 3,000 bicycle trips reported in the RTS. In reviewing these walk and bicycle trips, a distinction was made between individual one-way trips between specific origins and destinations (excluding unlinked trip leg segments of linked trips) and “loop trips” (trips that begin and end at the same exact location with no intermediate stops). Most daily walk and bicycle loop trips in the RTS were identified during the household member person interviews and included in the Person data file. Nonetheless, some additional loop trips were identified during the non-motorized trip editing process. Examples of loop trips that were observed in the trip file included walking to and from the mailbox, walking the dog, walking from home to a park and immediately returning home, and some jogging runs and recreational bike rides. These loop trips were summarized and added to the loop trips already in the Person data file.

Some of the reported walk trips were within the same shopping complex and involved walking outside from one store to another store. These were treated as walk trips and were left in the trip file.

Taxi/Ride-Hailing Trips

There were over 2,000 taxi and ride-hailing trips in the RTS. These modes were treated separately in the survey; there were about three times as many ride-hailing trips compared to taxi trips. A large proportion of taxi trips were to and from an airport. There were some cases observed where the respondent drove a taxi or ride-hailing vehicle to pick up and drop off passengers. These trips were kept in the Trip file but the activity was coded “work-related”.

Automobile Trips

Most trips reported in the RTS were automobile trips (drive alone, drive others, auto passenger). Some of these auto trips were flagged for inconsistent travel mode combinations which were corrected. Auto trips with more than one passenger (drive others, auto passenger) were also reviewed to ensure consistent trip reporting between the driver and the passenger(s). There were some cases where two household members went on an automobile trip together but it was only

reported by one household member. Where possible, these types of errors were manually corrected to ensure consistency.

Other Travel Modes

Other travel modes were checked for reasonableness and for proper coding of their reported unlinked trip sequence included MetroAccess, shuttle bus, intercity rail, intercity bus, taxi, ride-hailing, school bus, ferry/water taxi, and airplane/helicopter.

CONSISTENCY CHECKS

Speed/Distance Checks

Once the geocoding and modal checks were complete, speed and distance checks were performed. Vehicular trips with speeds greater than 90 miles per hour were reviewed for possible data errors. In some cases, a geocoding error was the reason for the unreasonably high speed. In other instances, the geocoded trip origins and destinations were found to be correctly coded, but the reported departure and arrival times did not appear to be reasonable. Geocoding errors were fixed in addition to questionable departure and arrival times. Travel times were estimated based on the travel mode and time of day. For trips involving more than one household member, trip departure and arrival times were corrected for each household member. There were some cases where long travel times (greater than 180 minutes) were correctly reported trips. These were primarily long-distance trips to and from destinations outside of the TPB region. In other cases, excessively long travel times were due to missing intermediate trips. In such cases, trip records were cross checked with other members of the household to impute missing trips. There were also instances where high-speed trips were correctly reported trips, such as an airplane trip from Washington, DC to Chicago.

Speed and distance checks were also done for reported non-motorized bike and walk trips. Reported walk trips with distances greater than 3 miles and/or calculated travel speeds greater than 6 miles per hour were reviewed for potential geocoding errors or other trip coding problems. Reported bike trips with distances greater than 17 miles or and/or calculated travel speeds greater than 15 miles per hour were reviewed for potential geocoding errors or other trip coding problems. Reported bike trips with distances less than 0.4 miles were also checked. Again, geocoding and misreported times accounted for the vast majority of problems identified, but a few incorrectly coded travel modes were also found. Geocoding and travel mode code errors were corrected, in addition to questionable departure and arrival times.

Loop Trip Check

Loop trips are defined as trips that begin and end at the exact same location with no intermediate stops. Examples of loop trips include someone walking their dog or taking a walk, a jog or bike ride for exercise or pleasure. Most loop trips begin and end at home, but not all. A lunch time walk or jog that starts and ends at a person's place of employment would also be considered a loop trip.

In the RTS, respondents were asked to report any walks or bike trips that have not already been reported in the travel diary, such as a walk around the neighborhood, a jog, or a bike ride for exercise. These were also considered walk and bike loop trips and were treated separately from trips with different origin and destination locations. All walk and bike loop trips were summarized separately in the Person data file.

Missing/Incomplete Trip Check

Missing or incomplete trips are defined as trips that had a missing trip segment. Most missing trip segments involved a return trip to home. An example would be a trip from home to school, but no return trip from school to home. Another example would be a trip from home to a store, but no return trip from the store to home. Such trips were coded as “incomplete” trips in the interim trip file and then further reviewed by COG/TPB staff. There were about 400 households in the RTS that had a missing or incomplete trip made by at least one household member. In most cases, the missing trip segment could be determined from the trip records of other members of the household. In these cases, the missing trip segment was added to the trip file. In a few cases where the missing trip segment could not be determined from other household members, all trip records for the person with the missing segment were removed from the trip file.

There also were some cases where a missing return trip to home were correctly reported. An example would be a trip from home to an out-of-town location such as a hotel or a friend’s house. Another example would be a trip from home to work for someone who works the “graveyard shift” where the return trip from work to home would be after the travel day ended at 3:00 AM. Those trip records were left unchanged during the trip editing process.

TRIP LINKING PROCEDURES

Statistical programming routines were developed to convert the responses for unlinked modal trip legs to linked trip records. Unlinked trip legs are defined as one-way travel to any location by a single mode of transportation. Linked trip records are trips between an origin and a destination for a single, primary trip purpose. Because a trip made for a single primary purpose can involve one or more changes in travel mode and/or include one or more incidental stops between the primary trip origin and destination, multiple unlinked modal legs of a trip made for a single purpose must be linked together and summarized into a single linked trip record for travel modeling and analysis purposes. Thus, the unlinked legs of reported single purpose trips that involved one or more “change mode(s)”, were linked together and summarized into a single linked trip record.

Trips Involving “Change of Mode”

The following examples illustrate how unlinked modal trip legs were converted to single purpose linked trip records.

Example 1: A commute trip from a home in Greenbelt, MD to a workplace near 17th & T St NW in the District of Columbia that involved: (1) an auto drive alone trip leg to the Greenbelt Metrorail station, (2) a Metrorail trip leg from the Greenbelt Metrorail station to the U Street Metrorail station, (3) a walk trip leg from the U Street Metrorail station to a bus stop at 13th & U St NW, (4) a bus trip leg

from the bus stop at 13th & U St NW to a bus stop at 17th & U St NW and (5) a walk trip leg from the bus stop at 17th & U St NW to a workplace near 17th & T St NW can be reported as many as five unlinked trip legs in the travel diary.

Example 1a: Unlinked Modal Trip Legs:

Person Number	Trip Number	Origin	Destination	Mode of Travel	Destination Activity
01	01	Home (Greenbelt, MD)	Greenbelt Metrorail Station	Drive Alone	Change mode
01	02	Greenbelt Metrorail Station	U Street Metrorail Station	Subway	Change mode
01	03	U Street Metrorail Station	Bus Stop @ 13 th & U St NW	Walk	Change mode
01	04	Bus Stop @ 13 th & U St NW	Bus Stop @ 17 th & U St NW	Local Bus	Change mode
01	05	Bus Stop @ 17 th & U St NW	Workplace (District of Columbia)	Walk	Work

There was some inconsistency in how respondents reported trips that involved multiple travel modes. Since the mode of travel question was a “check all that apply”, some respondents reported multiple modes for some trips. In effect, some respondents partially linked some trips by combining a transit trip with an access or egress trip, such as Trip Number 04 in the example below:

Example 1b: Partially Linked Trip Legs:

Person Number	Trip Number	Origin	Destination	Travel Mode	Destination Activity
01	01	Home (Greenbelt, MD)	Greenbelt Metrorail Station	Drive Alone	Change mode
01	02	Greenbelt Metrorail Station	U Street Metrorail Station	Subway	Change mode
01	03	U Street Metrorail Station	Bus Stop @ 13 th & U St NW	Walk	Change mode
01	04	Bus Stop @ 13 th & U St NW	Workplace (District of Columbia)	Local Bus, Walk	Work

The trip linking process eliminated these inconsistencies by collapsing all unlinked trip legs into a single linked trip from home to work, with a mode of access and egress:

Example 1a & 1b: Resulting Linked Trip:

Person Number	Trip Number	Origin	Destination	Primary Travel Mode	Detailed Travel Mode	Destination Activity

01	01	Home (Greenbelt, MD)	Workplace (District of Columbia)	Subway	Drive Alone, Subway, Local Bus, Walk	Work
----	----	-------------------------	--	--------	---	------

Example 1a & 1b: Mode of Access and Egress for Linked Trip that Involves Metrorail:

Person Number	Trip Number	Mode of Transit Access	Mode of Transit Egress	Subway Station Board	Subway Station Exit
01	01	Drive Alone	Walk	Greenbelt	U Street

Trips Involving Drop off/Pick Ups at Carpool Lots

Unlinked carpool pick up and drop off trip legs at carpool park and ride lots were also summarized into single-purpose linked trips as illustrated in Example 2.

Example 2: Carpool Lot Pick-Up Unlinked Modal Trip Legs:

Person Number	Trip Number	Origin	Destination	Travel Mode	Destination Activity
01	01	Home (Prince William, VA)	Horner Road Park & Ride Lot	Drive Alone	Drop off/pick up
01	02	Pentagon	Workplace (Arlington, VA)	Drive Others	Work

Example 2a: Carpool Lot Pick-Up Resulting Linked Trip:

Person Number	Trip Number	Origin	Destination	Primary Travel Mode	Detailed Travel Mode	Destination Activity
01	01	Home (Fairfax, VA)	Workplace (Alexandria, VA)	Drive Others	Drive Alone, Drive Others	Work

TRIP LINKING HIERARCHY

The computer program written to convert unlinked transit trip legs into single purpose linked trips used the following hierarchy to assign the primary mode of travel for the linked trip and the secondary modes of access and egress for linked transit trips:

1. Commuter Rail
2. Metrorail

3. Express/Commuter Bus
4. Local Bus
5. MetroAccess/Dial-a-Ride
6. Shuttle Bus
7. School Bus

In this hierarchy of modes, a trip that included use of commuter rail in any leg of a sequence of unlinked “change of mode” trip legs would be assigned a primary mode code of “Commuter Rail”. Thus, a reported trip with a sequence of unlinked “change of mode” trip legs that began with an “Auto Driver” trip to “Commuter Rail” and was then followed by a change of mode from “Commuter Rail” to “Metrorail” and then by a change of mode from “Metrorail” to “Local Bus” and then by a change of mode from “Local Bus” to “Walk” would be assigned a primary mode code of “Commuter Rail”. The Transit Access Mode for this trip would be “Auto Drive Alone” and the Transit Egress Mode would be assigned a “Metrorail-Local Bus-Walk” combination.

TRIP PURPOSE CATEGORIES

Home Trip Purpose Category

Any trip with a reported origin or destination activity of “Home” was reviewed for consistency with the reported origin or destination location of that trip. If the origin or destination location respectively matched the home address of the respondent, then the origin or destination trip purpose of that trip was assigned to the “HOME” trip purpose category. If the reported origin or destination activity was “HOME” and respectively the location address did not match the household’s home address, then the origin or destination trip purpose was assigned to the “OTHER” trip purpose category. Conversely, if the reported origin or destination activity was not “Home” and respectively the location address matched the household’s home address, then the origin or destination trip purpose was assigned to the “HOME” trip purpose category.

Work Trip Purpose Category

Any trip with a reported origin or destination activity of “Work” was reviewed for consistency with the trip’s origin or destination location. If the trip origin or destination address matched the respondent’s home address, then the origin or destination trip purpose was respectively assigned an origin or destination trip purpose of “HOME”. If the origin or destination location respectively matched the primary work address of the respondent, then the origin or destination trip purpose of that trip was assigned to the “WORK” trip purpose category. If origin or destination location respectively did not match either the home address or primary work address of the respondent, then the origin or destination trip purpose of that trip was assigned to the “WORK-RELATED” trip purpose category.

Work-Related Trip Purpose Category

Any trip with a reported origin or destination activity of “Work” and an origin or destination address respectively not matching either the home address or primary work address of the respondent was assigned an origin or destination trip purpose of “WORK-RELATED”.

Shop Trip Purpose Category

Trips with reported origin or destination activities of “Shopping”, “Meal”, or “Meal (quick stop)” were respectively assigned an origin or destination purpose of “SHOP” unless the reported location address matched the respondent’s home or primary work address.

School Trip Purpose Category

Trips with reported origin or destination activities of “School” were respectively assigned a trip purpose of “SCHOOL” unless the reported location address matched the respondent’s home or primary work address.

Gas/Electric Vehicle (EV) Charging Station Trip Purpose Categories

Trips with reported origin or destination activities of “Gas Station/EV Charging” were respectively assigned an origin or destination purpose of “GAS/EV CHARGING STATION” unless the reported location address matched the respondent’s home or primary work address.

Drop Off/Pick Up Someone Trip Purpose Category

Trips with reported origin or destination activities of “Drop off/pick up” were respectively assigned an origin or destination purpose of “DROP OFF/PICK UP” unless the reported location address matched the respondent’s home or primary work address. “Drop off/pick up” referred to trips where the primary activity was to drop off or pick up someone.

Other Trip Purpose Category

Trips with reported origin or destination activities of “Volunteer”, “Health care”, “Non-shopping errand”, “Socialize”, “Civic/Religious”, “Exercise”, “Recreation”, “Entertainment”, and “Other” were respectively assigned an origin or destination purpose of “OTHER” unless the reported location address matched the respondent’s home or primary work address.

External Point Trip Purpose Category

If the origin or destination location of a reported trip was an external location outside the TPB modeled area, origin or destination trip purpose of the trip was respectively recoded to the “EXTERNAL POINT” trip purpose category.

IMPUTATION OF MISSING HOUSEHOLD AND PERSON DATA

Item non-response, i.e., the refusal or the inability of survey respondents to answer particular questions complicates the use of the survey data for many purposes. These complications can be overcome by obtaining values for the missing data items by using a data imputation technique known as “hot decking.”

“Hot decking” is a data imputation technique that obtains a value for a missing data item by locating a nearest neighbor record with a non-missing value for the data item in question and assigning this value to the missing data item. A nearest neighbor record in hot decking is defined as one that most closely matches the respondent with the missing data item in terms of other key characteristics. For example, if a particular household did not answer the home ownership question, but the household’s home type, jurisdiction and PUMA of residence, and number of vehicles available in their household, is known, then this household’s home ownership can be imputed on a probability basis using the distribution of housing type, jurisdiction and PUMA of residence, and number of vehicles for other households in the housing type, jurisdiction and PUMA of residence, and number of vehicles categories.

Hot decking techniques were used to impute values for all missing data items in the household and person files. Fortunately, few data values had to be imputed in this manner. Except for the race/ethnicity and household income questions, item non-response was exceedingly low, less than 2% in most cases. Item non-response was 11% for the race/ethnicity question, and 17% for the household income question. Imputation data flags in the household and person data files identify all imputed data values in these survey data files.

SURVEY EXPANSION

Weighting of the 2017-2018 RTS

The Regional Travel Survey (RTS) data were weighted in a multi-step process. First, initial household, person, and trip weights were calculated based on the probabilities of selection for individual households in the RTS where complete reporting of travel day activities were obtained for each household member, i.e., “completed households”. Second, the initial survey weights for TPB member jurisdictions were adjusted to match an estimated household size distribution based on the 2017 1-year American Community Survey Public Use Microdata Sample (ACS PUMS) data expanded to the Metropolitan Washington Council of Governments (COG) Cooperative Forecast (Round 9.1a) household totals for 2018. Third, the household, person, and trip weights from the 2018-2019 Maryland Travel Survey (MTS) for three “TPB Modeled Area Overlap Jurisdictions” (Anne Arundel County, Carroll County, and Howard County) were incorporated into the RTS for these jurisdictions. Finally, a Worker Workplace/Metrorail adjustment of RTS person and trip weights was made to better approximate jurisdiction to jurisdiction commuting flows based on ACS PUMS/Census Transportation Planning Products (CTPP) data and weekday Metrorail ridership based on Washington Metropolitan Area Transportation Authority (WMATA) Metrorail ridership statistics and survey data.

Initial Survey Weights

Initial RTS survey weights were based on the probabilities of selection of individual completed households in 111 State County-PUMA-Area Type strata. The RTS was conducted using an address-based sample obtained from Marketing Systems Group (MSG) in seven separately spaced sample draws between August 2017 and October 2018. Counts of total active residential postal addresses in each stratum were provided by MSG at each sample draw. The seven counts were averaged together to obtain an overall average for the entire RTS survey period. Because response rates typically differ by type of dwelling unit the percentages of single-family (SF) and multi-family (MF) dwelling unit types in each stratum were calculated from the cumulative 436,000 MSG address sample. These percentages were then applied to the postal address count averages to obtain estimated totals of SF and MF dwelling units in each stratum. The percentage of RTS recruitment letters sent out but returned as undeliverable was also calculated and applied to the postal count averages to obtain estimated totals of deliverable and undeliverable postal addresses by dwelling unit type in each stratum.

Initial counts of RTS completed households were summarized by dwelling unit type and strata. Home addresses reported by household respondents in the survey interview were checked against the home address to which RTS recruitment letters were mailed. A total of 288 home addresses were identified where the home address reported by the household was different from the recruitment letter mailing address. Most of these differences were relatively minor (e.g., a different unit in the same apartment complex or a nearby house on the same street). Of the 288 mismatching addresses only 63 were in strata different from the address where the recruitment letter was mailed and 25 of these were cases where the mailing addresses was a “Only Way to Get Mail” P.O. box. A decision was made to assign these 63 completed households to the survey strata where the reported home address was located.

Initial household survey weights were calculated by dividing the estimated number of deliverable postal addresses for each dwelling unit type in each stratum by the corresponding number of RTS completed households in these dwelling unit type/stratum classifications. These initial household weights were also assigned as initial person weights for each household member in the person survey file, and as initial trip weights for trips made by these household members in the trip file.

Household Size Adjustment for TPB Member Jurisdictions

The distribution of RTS completed households by household size in TPB member jurisdictions was found to be significantly different from that reported in Census ACS tabulations. The reason for this difference was largely because a household was only considered to be “completed” if all members of the household reported their travel day activities. Hence, it was easier to obtain complete reports from all members of the household from smaller households than from larger households.

Household size adjustment factors based on the 2017 1-year ACS PUMS data were developed to account for the overrepresentation of smaller households and the underrepresentation of larger households in the RTS completed household data. These household size adjustment factors were developed for the following TPB member jurisdictions:

- Core Jurisdictions: District of Columbia, Arlington County VA, City of Alexandria VA
- Inner Suburb Jurisdictions: Montgomery County MD, Prince George’s County MD, Fairfax County/Cities VA (Fairfax County and the independent cities of Fairfax and Falls Church),
- Outer Suburb Jurisdictions: Charles County MD, Frederick County MD, Loudoun County, Prince William County/Cities VA (Prince William County and the independent cities of Manassas and Manassas Park)

In addition, because of methodological differences in the way TPB member jurisdictions respectively estimate total households for their jurisdictions, a decision made to calculate the household size weighting adjustment based on COG Round 9.1a Cooperative Forecast household totals for 2018 rather than ACS PUMS totals for these jurisdictions.

The calculated household size adjustment factors expanded to represent 2018 Round 9.1a Cooperative Forecasts were applied to the initial survey weights to obtain final RTS “Household-Based” household, person, and trip weights for the TPB member jurisdictions. A probabilistic rounding function was applied to these weights so that these weights would be expressed as integer values.

TPB Modeled Area “Overlap Jurisdictions”

Three jurisdictions included within the geographic boundaries for the TPB travel demand modeling area overlap with the Metropolitan Planning Organization (MPO) planning region for the Baltimore Regional Transportation Board (BRTB) that is housed and staffed by the Baltimore Metropolitan Council (BMC). The three “overlap jurisdictions” are Anne Arundel County, Carroll County, and

Howard County in Maryland. Because the TPB and BRTB regularly coordinate on many mutual transportation planning activities, including travel surveys, the RTS was closely coordinated with the BMC staff managing the Maryland Travel Survey (MTS) that was being conducted in the same time period as the RTS.

It was agreed that both the RTS and the MTS would survey households in the three overlap jurisdictions and that data collected would be shared in each survey effort. The sample of postal addresses drawn for these jurisdictions was coordinated so that sample addresses were assigned exclusively to either the RTS or the MTS. Key data items collected in the RTS and MTS were also coordinated to enable data sharing after the data collection was completed.

It was further agreed that the completed household survey data in the three overlap counties collected in the RTS would be combined with the completed household data collected in the MTS and that the MTS survey consultant would process and weight the combined data. Approximately 40% of the combined data for the three overlap counties was collected in the RTS and 60% was collected in the MTS.

The combined data received from the MTS consultants has been fully incorporated into the final RTS household, person, trip, and vehicle files. The household, person, and trip weights calculated by the MTS consultants were also accepted as the final RTS “Household-Based” household, person, and trip weights for the three overlap county jurisdictions.

TPB Modeled Area “Outer County” Jurisdictions

The TPB Modeled Area also includes nine jurisdictions beyond the boundaries of the TPB planning region. These jurisdictions are Calvert and St. Mary’s Counties in Southern Maryland, King George County, City of Fredericksburg, Stafford County, Spotsylvania County (northern portion), Fauquier County (outside the urbanized area), and Clarke County in Virginia, and Jefferson County in West Virginia. Because the focus of the TPB’s transportation planning activities are on its MPO planning region, there is a lower level of detail for these Outer County jurisdictions in the TPB’s travel demand modeling. These jurisdictions are included in the modeling area primarily to address travel demand and traffic assignment issues at the edges of the TPB’s planning region. Thus, the sample sizes in the RTS for these jurisdictions were relatively small ranging from approximately 50 to 200 household samples for individual jurisdictions.

In addition, the relatively small population size for these Outer County jurisdictions meant that they were combined with other jurisdictions in the 1-year ACS PUMS data so the household size adjustment factors applied to the survey weights for these jurisdictions were based on the average household size distribution for the Public Use Microdata Sample Area (PUMA) in which the individual jurisdiction was located. Further, these household size adjustment factors were not expanded to Round 9.1a household totals.

Consequently, estimated household and household population totals based on the final RTS “Household-Based” household, person, and trip weights for these jurisdictions are subject to a much

higher degree of variability than those for TPB member jurisdictions and the three modeled area overlap jurisdictions.

Worker Workplace/Metrorail Adjustment Factor

Metrorail usage is an extremely important consideration in the TPB's transportation planning activities. Because of this consideration, estimated Metrorail usage based on the final RTS "Household-Based" trip weights was compared to reported weekday Metrorail Ridership statistics for 2018. This comparison showed a 30% overestimate of Metrorail ridership based on the RTS trip weights relative to 2018 ridership counts based on Metrorail station boardings.

Investigation of the reasons for this overestimate of Metrorail usage revealed a "Worker Workplace" bias in the RTS data. Comparing estimated RTS jurisdiction-to-jurisdiction commuting flows with similar data from the 1-year 2018 ACS PUMS data and the 5-year 2012-2016 CTPP data showed significant overestimates of RTS worker commutes to the District of Columbia and Arlington County and significant underestimates of commuting trips to Fairfax, Loudoun, and Prince William Counties.

Data from the 2016 Metrorail Passenger Survey was also reviewed and analyzed. Because this survey data was collected by boarding station, boarding time period, trip purpose, and jurisdiction of residence, it was possible to combine this data with 2018 weekday Metrorail boardings by station to produce 2018 estimates of Metrorail boardings by jurisdiction of residence for both commuting and non-commuting purposes.

It was found that adjustment of the workplace distribution for RTS commuting workers to better approximate the commuting worker workplace distribution observed in the ACS PUMS and CTPP data resulted in an extremely good match with estimated 2018 Metrorail commuting trips by jurisdiction of residence. Thus, adjusted person and trip weights were calculated based on an estimated 2018 ACS PUMS/CTPP commuting worker workplace distribution and applied to commuting workers in the RTS person and trip files.

The worker workplace adjustment did not completely resolve the RTS overestimate of weekday Metrorail trips. Consequently, a further Metrorail weighting adjustment was calculated and applied to the RTS person and trip weights for all persons reporting a non-commuting Metrorail trips on their travel survey date. This adjustment was calculated by dividing 2018 non-commuting trips estimated from the 2016 Metrorail Passenger Survey and 2018 weekday boarding counts by non-commuting Metrorail trips estimated from RTS "Household-Based" trip weights.

Tables 2, 3, and 4 summarizes the weighting of the 2017-2018 RTS.

Table 2: Summarization of RTS Household Weighting

Jurisdiction of Residence	Initial Weight Household Estimates	Final Weight Household Estimates	2018 Round 9.1a Households
District of Columbia	293,022	308,656	310,419
Arlington County, VA	108,519	108,430	108,732
Alexandria city, VA	74,522	73,812	73,875
Montgomery County, MD	378,840	382,029	384,635
Prince George's County, MD	326,760	329,189	329,018
Fairfax/Cities, VA	420,465	423,150	425,550
Loudoun County, VA	130,461	130,784	131,170
Prince William/Cities, VA	167,902	167,742	168,304
Charles County, MD	56,333	57,483	57,645
Frederick County, MD	92,266	94,675	95,191
Carroll County, MD	61,220	60,375	62,023
Howard County, MD	114,233	112,934	117,601
Anne Arundel County, MD	212,893	207,382	209,511
Calvert County, MD	30,057	29,859	33,100
St. Mary's County, MD	38,276	38,494	42,276
King George County, VA	9,523	9,970	8,691
Fredericksburg city, VA	10,850	10,400	10,736
Stafford County, VA	48,879	49,324	47,572
Spotsylvania County, VA	46,950	46,495	43,941
Fauquier County, VA	25,501	25,504	25,714
Clarke County, VA	5,725	5,728	5,676
Jefferson County, WV	20,010	19,718	22,721
Total Households	2,673,207	2,692,133	2,714,101

Table 3: Worker Workplace/Metrorail Weighting Adjustments

Jurisdiction of Residence	May 2018 Metrorail Commuting Trip Estimates based on 2016 Survey Distribution and 2018 Boarding Counts	2017-2018 RTS Metrorail Commuting Trip Estimates with Worker Workplace Weighting Adjustment	May 2018 Metrorail Non- Commuting Trip Estimates based on 2016 Survey Distribution and 2018 Boarding Counts	2017-2018 RTS Metrorail Non- Commuting Trip Estimates with Non- Commuting Metrorail Weighting Adjustment
District of Columbia	116,778	116,422	72,524	72,877
Arlington County, VA	44,573	44,634	18,134	18,067
Alexandria city, VA	23,061	24,305	6,941	5,700
Montgomery County, MD	81,883	80,879	29,946	30,965
Prince George's County, MD	66,014	63,278	20,388	23,096
Fairfax/Cities, VA	62,329	62,338	17,498	18,869
Loudoun County, VA	4,481	3,626	1,503	2,362
Prince William/Cities, VA	5,254	4,101	2,168	3,323
Charles County, MD	3,270	1,582	723	2,064
Frederick County, MD	2,636	1,844	591	861
Carroll County, MD	273	200	56	-
Howard County, MD	2,674	2,385	717	1,007
Anne Arundel County, MD	7,420	4,755	1,745	3,669
Calvert County, MD	552	-	155	407
St. Mary's County, MD	204	456	91	-
King George County, VA	60	-	50	-
Fredericksburg city, VA	191	49	95	48
Stafford County, VA	1,477	612	426	395
Spotsylvania County, VA	356	379	229	379
Fauquier County, VA	212	-	117	48
Clarke County, VA	18	-	13	132
Jefferson County, WV	335	404	127	406
Total Households	424,050	412,249	174,237	184,675
Baltimore County	2,308	-	584	-
Baltimore City	2,425	-	966	-
Other Maryland	2,583	-	679	-
Other Virginia	946	-	1,208	-
All Other	2,205	-	14,232	-
External	10,467	-	17,668	-
Total Weekday Metrorail Trips	434,517	-	191,905	-

Table 4: Summarization of RTS Person Weighting

Jurisdiction of Residence	Initial Weight Household Population Estimates	Final Weight Household-Based Population Estimates	Worker Workplace/ Metrorail Adjusted Final Weight Household Population Estimates	2018 Round 9.1a Household Population Estimates
District of Columbia	544,595	659,010	664,500	660,191
Arlington County, VA	197,343	232,352	232,918	228,099
Alexandria city, VA	130,248	159,529	159,633	152,589
Montgomery County, MD	843,440	1,043,887	1,046,576	1,027,232
Prince George's County, MD	685,079	876,645	876,909	894,591
Fairfax/Cities, VA	950,128	1,160,902	1,162,938	1,174,747
Loudoun County, VA	335,385	391,400	390,858	399,315
Prince William/Cities, VA	405,056	521,415	522,324	512,687
Charles County, MD	133,328	158,569	158,942	159,130
Frederick County, MD	215,615	256,933	257,166	254,918
Carroll County, MD	151,676	169,395	169,355	164,950
Howard County, MD	259,499	310,116	310,251	325,174
Anne Arundel County, MD	499,925	542,245	542,250	553,987
Calvert County, MD	73,628	82,384	82,383	92,290
St. Mary's County, MD	90,348	99,818	99,907	113,860
King George County, VA	24,615	31,353	30,912	25,554
Fredericksburg city, VA	23,254	24,470	24,698	29,003
Stafford County, VA	125,083	138,738	138,828	149,547
Spotsylvania County, VA	110,820	129,209	129,323	103,403
Fauquier County, VA	59,382	66,100	65,712	70,447
Clarke County, VA	12,747	14,226	14,150	14,030
Jefferson County, WV	45,384	47,804	47,735	59,377
Total Households	5,916,578	7,116,500	7,128,268	7,165,121

PUBLIC RELEASE FILES

The public release files from the 2017/2018 Regional Travel Survey are organized into four different data files:

1. **Household File** – data collected once for the household;
2. **Person File** – data items collected for each interviewed household member;
3. **Vehicle File** – data items related to the household's vehicles;
4. **Trip File** – data items collected for each trip made by each household member on the household's assigned travel day.

In addition to the RTS Technical Documentation, the analyst should also refer to the RTS Public File data dictionary which lists all variables in the data files, including the variable label, variable type, and scale of measurement. The file formats for the household, person, vehicle, and trip files are available in Appendix B – Appendix E, and frequency tables for most variables are available in Appendix F – Appendix I.

Which Weight to Use?

The RTS data files contains several different weights, and it is imperative to use the appropriate weight to produce accurate tabulations that reflect selection probabilities; the weights also reflect adjustments to account for eligibility, nonresponse, and coverage bias. The weighting procedures that were applied to these files were designed to provide correctly balanced estimates by geographic area and demographic factors such as household size. It is strongly recommended that appropriate weights should be applied to produce the most accurate estimates, as tabulations without weights may be significantly different from weighted estimates and may be subject to large biases.

Similar to other household travel surveys, the data files include the household weights, person weights, and trip weights.

- **Household weights** (WTHHFIN). These weights should be used when tabulating an estimate for a household level variable (e.g., number of household workers, vehicles, etc.)
- **Vehicle weights** (WTHHFIN). These weights are the same as the household weight since vehicle is a household attribute.
- **Person weights** (WTPERFIN and WWM_WTPERFIN). These weights should be used for person-level estimates of demographic characteristics (e.g., age, gender, employment status), in addition to questions about typical weekday travel (e.g., telecommute frequency, usual commute mode) that are NOT observed trips from the travel diary.
- **Trip weights** (WTTRDFIN and WWM_WTTRDFIN). These weights should be used for estimates of observed trips from the travel diary (e.g., origin and destination trip purpose, primary travel mode, transit access and egress).

Note that the person and trip file contain both the original weights (WTPERFIN and WTTRDFIN) and the Worker Workplace/Metrorail (WWM) weights to adjust for bias in Metrorail trips and worker

commutes into the District of Columbia and Arlington County. While both sets of weights are included in the public release data files, the analyst should exercise discretion in determining which weights to use in their analysis. For example, it is recommended that tabulations of travel mode (particularly Metrorail) and commutes to the regional core use the WWM weights to produce more accurate estimates.

Merging Data from Multiple Files

It is likely that the analyst will need to use information from multiple files (e.g., household and person files). For example, to investigate daily trip patterns by age, one would need to use the age variable from the Person File and link it to the trip variables in the Trip File. Each household is identified by a unique household ID number; within each household, household members are identified by a unique person ID number; and trips taken by household members are identified by a unique trip ID number. All four data files (household, person, vehicle, and trip) contain the household ID, and both the Person and Trip Files include the Person ID. Therefore, the files can be joined on person ID or household ID.

After performing the appropriate data file merge, the analyst should use discretion to determine the appropriate weights.

“MPO” Variables

There are several variables in the data files that have “MPO_” prepended to the variable name (e.g., “HOME_TYPE” and “MPO_HOME_TYPE”). The “MPO_” variables include the original variable coding that was used in the 2017/2018 Regional Travel Survey, and generally include more detailed categories than variables without the “MPO” prefix, which also include records from the Maryland Travel Survey. The analyst should use discretion to determine which variable is most appropriate to use. For example, if the analyst is interested in more detailed tabulations of apartments/condos, the “MPO_HOME_TYPE” variable should be used.

Frequency Tables

The frequency tables for most variables in the Household, Person, Vehicle, and Trip Files are included in the appendices of the Technical Documentation (Appendix F – Appendix I). These frequency tables should be used as robustness checks to determine the reasonableness of estimates.

APPENDIX A – RSG REGIONAL TRAVEL SURVEY FINAL REPORT

Metropolitan Washington Council of Governments

REGIONAL TRAVEL SURVEY

Final Report | July 31, 2019



PREPARED FOR:
METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

SUBMITTED BY:
RSG

IN COOPERATION WITH:
ART & NEGATIVE
BERNETT GROUP
CASA DE MARYLAND
DATA PERSPECTIVES CONSULTING
DP CONSULTING
STACEY BRICKA

2200 Wilson Boulevard, Suite 410
Arlington, VA 22201-3324
888.774.5986
www.rsginc.com

1.0 INTRODUCTION

This report summarizes the survey design and methods used to collect travel data for the Regional Travel Survey (RTS), conducted on behalf of the National Capital Region Transportation Planning Board (TPB), the federally designated metropolitan planning organization for the Washington, DC, planning region. The report documents questionnaire design, survey methodology, sample planning, quality control procedures, and high-level survey results. The main survey was conducted between October 2017 and December 2018. A total of **16,488 households across the region fully completed the main survey** and passed quality control checks. These households are the basis for this report.

1.1 REGIONAL TRAVEL SURVEY OVERVIEW

The 2017–2018 RTS required the collection of complete travel survey data from all members of 15,000 households in the Washington, DC, Planning Region, as designated by the TPB. The Metropolitan Washington Council of Governments (MWCOC) was the lead agency for the survey. RSG was the primary consultant between October 2017 and December 2018. Art & Negative Printers, Bennett Group, Data Perspectives, DP Consultants, ETC Institute, and Stacey Bricka were subconsultants to RSG at some point during the project lifecycle.

The data collected by the RTS will help update the regional model with household and individual travel behavior for residents across the region. The last large-scale regional household travel survey (HTS) of this type in the Metropolitan Washington region was conducted in 2007 and collected data from approximately 11,000 households. In subsequent years, regional demographics, employment, land use, and travel patterns changed significantly. Census records and other types of data can quantify some of these changes, but regional planners require a more comprehensive and up-to-date database of travel behaviors. The survey data from this RTS will facilitate improvement of the current regional four-step model and the development of the forthcoming activity-based travel demand model; the survey data will also support informed planning and policy decisions.

1.2 SURVEY AREA

The survey area includes the entirety of the TPB model region. The TPB model region covers a wide geographic area that stretches east to the Chesapeake Bay, west to the Blue Ridge Mountains, north to the Pennsylvania border, and south to Fredericksburg, Virginia, and Southern Maryland. The region includes the District of Columbia and other local jurisdictions and communities in Maryland, Virginia, and West Virginia. Figure 1 is a map of the TPB model region.

FIGURE 1: MWCOG/TPB MODEL REGION



The model region includes jurisdictions within the oversight of the TPB and some counties that directly surround the TPB region that are part of the extended TPB model region.

1.3 PRETEST SUMMARY

The primary objective of the pretest survey was to test the RTS survey methodology in preparation for the main survey effort, which began in October 2017. The pretest goal was to sample up to 800 households. The methodology evaluated multiple data collection instruments and methods to estimate response rates for the main survey. MWCOG selected the pretest sample areas and provided the sample addresses to RSG for additional processing. Half of the pretest sample households were asked to report their travel for a single 24-hour period via the

online survey instrument, rSurvey™ (or by through a Computer Assisted Telephone Interview [CATI] administered by the survey call center). The other half of the sample addresses recorded their travel via a smartphone GPS application, rMove™, for up to seven days. Only household members 16 and older participated using rMove. Parents of children under 16 reported their travel within the rMove app.

Additionally, MWCOG staff and select TPB members participated in the pretest to help further their understanding of the respondent survey experience. The pretest survey dates were from February 9, 2017 (first survey opened) to April 4, 2017 (last survey closed). Invitation letters were mailed to 16,020 households and 537 households completed the survey (excluding MWCOG staff and TPB members). After the pretest, RSG and Stacey Bricka met with MWCOG to review survey results and determine their preference for the nonresponse follow-up. Pretest lessons learned were discussed and the project team made several modifications to the survey methodology, including the following:

- Refined the estimated response rates for the main survey.
- Modified the mailing schedule and the order of mail type (i.e., letter packet and reminder postcards).
- Increased the incentive amount offered to household from \$10 to \$20 per household.
- Revised the survey instrument and survey materials.
- Elected to offer participants two participation modes: web and telephone.

1.4 NONRESPONSE FOLLOW-UP

After the pretest survey, RSG conducted a nonresponse evaluation to inform sample planning for the main survey. RSG evaluated the pretest results to improve the demographic composition of the main survey results. There were four main questions to the pretest evaluation:

- How well do the self-reported demographic characteristics of participants match census?
- Were there demographic differences between block groups where recruited households lived versus block groups sampled but from which no one participated?
- How reliable were the demographic indicators provided by the sampling vendor?
- What other indicators of nonresponse could be gleaned from the sample?

Nonresponse Findings and Main Survey Adjustments

The key findings from the analysis were as follows:

- Pretest nonrespondents included lower-income households, renters, larger households (4+ persons), those of Hispanic origin, minority populations, and those ages 18 to 24 years old.
- Geographically, the nonparticipant characteristics were found in block groups where no one participated (partially due to the small pretest sample size). The address-count group

sampling process for the main survey was fine-tuned to invite more households in nonresponding areas.

- Generally, the distribution of recruited households follows that of the sample (but not the census), with slight variations:
 - Three percent higher participation in Arlington-Alexandria strata.
 - Two percent lower participation in the high-density suburbs.
 - Three percent lower participation in the outer ring.
- Demographically, the address vendor variables appeared to explain characteristics, particularly for dwelling type, income, and household size (# children, # adults), but the strength of the vendor variables varied across the region.
- The address vendor sample was generally effective in the mailing, with only 3.4% invitation letter packets returned as nondeliverable. The proportion of nondeliverable sample was slightly higher in the Washington, DC, jurisdiction than in the other parts of the survey area.
- The address vendor sample was less effective with telephone numbers; 18% of the telephone numbers were not in service. Dialing once through the sample resulted in 13% refusals and 67% of the sample with no contact made. In the main survey, dialing was prioritized for only low-responding groups in the targeted Hispanic outreach sample.
- Even with oversampling in the pretest, only 6% of those contacted in the pretest agreed to participate. With a low participation rate, there was a legitimate concern that participating households would not fully represent the survey area population. Research shows that offering higher incentive payments increases response rates, especially in harder-to-reach households; therefore, the incentive per households was increased from \$10 to \$20 for the main survey.

The RTS survey region covers 20 counties with a diverse population of over 7 million people. To provide a strong planning foundation, the RTS survey respondents should approximate the demographics of the entire region as closely as possible prior to data weighting. Sample planning and survey methodology adjustments implemented based on the nonresponse evaluation and sample adjustments throughout data collected resulted in the RTS survey exceeding the overall sample target and meeting most geographic and demographic sample targets. The targeted effort to reach Latino/Hispanic households is documented in Section 6.0 of this report.

2.0 QUESTIONNAIRE DESIGN

2.1 OVERVIEW

To fulfill the needs of the travel demand model and collect essential information for making current and future transportation planning decisions, the RTS collected travel information from all individuals in a household. Demographic information and typical travel behavior from households and individuals helped explain variations in travel patterns, ensure that the final survey responses were representative of the region, and allow for weighting and expansion of the data to the household population in the region.

The survey was designed with two distinct parts based on the core and supplemental information desired:

- **Part 1—Recruit Survey:** Collected information about the household, its members, and vehicles.
- **Part 2—Diary:** Collected data about household travel on one 24-hour weekday.

The survey used the online survey instrument, rSurvey, to collect a one-day travel diary for each household member. The survey was developed in three phases with input from MWCOG during each phase:

- **Phase One—Variable Identification:** RSG worked with MWCOG to develop a list of essential variables for the survey based on RSG's HTS experience and review of recent similar studies. The final list consisted of "core" data elements required for transportation modeling and several "supplemental" questions about commuting behaviors, travel preferences, and typical trip-making behavior over time; these data are not required for modeling but assist the transportation planning process. RSG weighed model needs and transportation planning needs to determine which questions to include in the survey, maintaining awareness of survey burden and response rates.
- **Phase Two—Questionnaire Development:** Using the final list of variables approved in Phase 1, RSG updated the pretest questionnaire. The questionnaire is available in Appendix D. The questionnaire included all survey instructions, questions, and answers. MWCOG reviewed and provided updates to question wording, preferred response options, question order, and branching. RSG made revisions accordingly, and MWCOG received final approval of the questionnaire prior to programming the survey in Phase 3.
- **Phase Three—Survey Design and Implementation:** Using the questionnaire from Part 2 as the script, RSG revised the already programmed pretest survey instrument. MWCOG tested and approved the survey prior to fielding the main survey. Screen captures of the survey instrument are in Appendix D.

2.2 PART 1—RECRUIT SURVEY

A typical HTS consists of two parts: 1) recruit survey; and 2) trip/activity diary (i.e., retrieval survey). This was also the format for the RTS. Part 1 was a stand-alone recruit survey. One adult (age 18+) household member was required to complete the recruit survey via the internet or telephone. For participants that preferred to complete the survey over the phone, Burnett Group used the same online survey instrument to administer the survey verbally. Part 1 collected basic household-, vehicle-, and person-level information. Information collected included demographics, typical travel behaviors, household vehicle information, and administrative details like contact information and incentive preferences to aid in the administration of Part 2. Respondents who completed Part 1 were then shown (or read) a survey dashboard with further instructions about completing Part 2 of the survey.

Household Information

Household data collected in the Part 1 survey included the following:

- Household composition (number of members and relationships to householder).
- Household demographics (e.g., income).
- Current home location, type, and tenure.
- Number of household vehicles.
- Administrative data (e.g., contact information and incentive preferences).

FIGURE 2: EXAMPLE HOUSEHOLD INCOME QUESTION (BROAD)


The screenshot displays the 'REGIONAL TRAVEL SURVEY' interface. The header features the title 'REGIONAL TRAVEL SURVEY' and the tagline 'Planning Our Future Together' alongside icons for various transportation modes: bus, train, car, bicycle, and pedestrian. The main content area poses the question: 'Would you be willing to share less detailed information about your household's 2016 income?'. It provides context: 'We ask to help understand how closely the people who participate in this survey represent the region's true population. It also helps understand how residents are impacted by different transportation projects, policies, and costs.' and a privacy assurance: 'Your answers will be kept strictly anonymous and will be grouped with answers from all other participating households. Please see our [privacy policy](#) for more information.' Three radio button options are presented: 'Less than \$50,000', '\$50,000 or more' (which is selected), and 'Prefer not to answer'. Navigation buttons for '« Previous' and 'Next »' are located below the options. A footer bar contains links for 'Privacy Policy', 'Travel Log', 'Contact Us', and 'FAQs'. A progress indicator at the bottom shows a blue bar at 70% completion.

Person Information

The person-level details collected in the recruit survey included the following:

- Person-level demographics (e.g., age, gender, employment status, education level).
- Work details (if employed) for up to three jobs (e.g., work locations, occupation/industry):
 - Figure 3 shows example questions asked of participants who commuted to work.
- School details (if applicable) (e.g., school locations and typical school commute).
- Other travel behavior questions (e.g., driver's license possession and frequency of rideshare service use).

FIGURE 3: EXAMPLE WORK DETAILS QUESTIONS

REGIONAL TRAVEL SURVEY |  **Planning Our Future Together**

For many people, going to/from their job is a major part of their travel each week.
Next, we will ask a few questions in order to better understand commuting across the region.

You reported that you currently have 3 jobs. Please describe your **FIRST** job.

Employer's type of organization (e.g., nonprofit, government)

Usual work location

Usual number of **WEEKDAY** (Monday–Friday) commutes per week?

Usual way of commuting to primary workplace

Usual number of **WEEKDAY** (Monday–Friday) telecommutes per week?

Amount of flexibility in arrival time at workplace

Usual work start time

Usual work end time

Does employer offer any of the following transportation benefits?
Please select all that apply.

Free Parking ☐

Subsidized/Pre-Tax Benefit for Parking ☐

Subsidized/Pre-Tax Benefit for Transit Use ☐

Cash or other incentives for Carpool and Vanpool ☐

Cash or other incentives for walking or biking to work ☐

Electric vehicle charging station ☐

Secure bicycle parking facility ☐

None, employer doesn't offer any transportation benefits ☐

Don't know ☐

« Previous **Next »**

Privacy Policy | Travel Log | FAQs

Questions or comments? Contact us at help@regionaltravelsurvey.com

57%

Vehicle Information

Respondents were asked how many motor vehicles their household regularly uses—whether owned, leased, or company-owned (including cars, trucks, SUVs, vans, RVs, and motorcycles). Households were instructed to exclude uninspected/unregistered motor vehicles and vehicles such as all-terrain vehicles, snowmobiles, trailers, golf carts, watercraft, and carshare vehicles. For each reported vehicle, respondents were asked to provide several details about household vehicles.

Vehicle details collected in Part 1 were used to prepopulate trip details for participants in Part 2, meaning that any vehicle listed in the recruit survey became a mode option for each trip reported in Part 2. Respondents were shown (or read) a survey dashboard with further instructions about completing Part 2 of the survey after they had completed Part 1.

Travel Period Assignment

To collect travel data with an even distribution by weekday, RSG preassigned all households a travel day of week (excluding weekends) prior to data collection. On completing Part 1 of the survey, participating households were assigned a 24-hour travel period on their assigned weekday of the following week, occurring 3–8 days after Part 1.

2.3 PART 2—TRAVEL DIARY

Travel days (or periods) were assigned in real time based on when respondents completed the Part 1 survey. Travel day of week was preassigned to control for the day of week distribution. The goal of real-time travel period assignment was to quickly assign dates, so respondents did not drop out of the survey prior to their assigned travel date—but far enough into the future to ensure the entire household had reviewed the instructions.

The survey collected a one-day travel diary containing person-level and trip-level data for each household member in households assigned to complete Part 2. Each household member was asked to report all the trips they made during their preassigned 24-hour travel period (their “travel date”). Additionally, this survey included a small number of questions about other activities on the travel date (including explanation of why no trips were made, if that were the case). The Part 2 survey was made available to respondents on the day after their assigned travel date.

Person Information

The Part 2 travel diary survey began by collecting person-level information about each household member’s travel date. The first question in the Part 2 survey was a proxy reporting question to determine whether the respondent was filling out his or her own survey, was present while another household member filled out the survey, or was not present while the survey was

filled out by another household member. Respondents then reported where they started and ended their travel day (defined as 24 hours, beginning at 3:00 a.m. on the travel date). If respondents reported that they did not go anywhere on their travel date, then they were not shown the trip-reporting roster and were asked to select one or more reasons why they did not travel.

Person-level details collected in the Part 2 travel diary survey included the following:

- Location at start of travel day and location at end of travel day.
- Types of auto trips taken (e.g., if made trips using a High Occupancy Vehicle [HOV] lane or paid for parking on travel day).
 - These details were collected prior to the set of questions asked about each individual trip and were used to reduce survey burden by allowing respondents to skip related questions about each trip if they previously confirmed that they did not engage in these activities at any time on their travel day.
- Time-use questions (e.g., time spent telecommuting or shopping online).
- Trip replacement questions (e.g., if mailed packages or food were delivered to the home). Trip replacement questions were only shown to the first household member age 18 or older to fill out the Part 2 travel diary.

Trip Information

The survey asked respondents to provide a full list of all the places they went during their travel dates (Figure 4). After the trip roster page, a prompt question asked respondents to verify that they had reported all their trips; this question listed the types of trips that are commonly overlooked and provided respondents with the opportunity to return to their rosters to add these or any other types of trips they may have forgotten to report. Commonly underreported trips are often short trips (e.g., stops for gas or running a short errand on a lunch break).

FIGURE 4: EXAMPLE ONLINE TRIP ROSTER

REGIONAL TRAVEL SURVEY | Planning Our Future Together

Please list, in order, all the places you went between 3 a.m. on Monday, November 06, 2017 and 3 a.m. on Tuesday, November 07, 2017.

Please provide a unique name or short description for each place visited. When all places are listed, click "Next" to continue.

Click and drag a place to re-order the list. Click the **+** icon next to a place to add a new one below. Click the **-** icon to remove a place.

I **BEGAN** the day at: HOME **+**

Then went to: KIM'S WORK **-** **+**

Then went to: KIM'S WORK2 **-** **+**

Then went to: HOME **-** **+**

Then went to: T'S SOCCER PRACTICE **-** **+**

I **ENDED** the day at: HOME

Your Household's Locations

Type **HOME** for your home

Type **KIM'S WORK** for Kim's workplace at K Street Center for Graduate Education

Type **KIM'S WORK2** for Kim's workplace at 3506 Georgia Ave NW

Type **DAVID'S WORK3** for David's workplace at 2415 Eisenhower Ave

Type **TOMMY'S SCHOOL** for Tommy's school at 1200 L St NW

Example Travel Day

Began day at: Home

Then went to: Children's school

Then went to: Convenience Store

Then went to: Work

Then went to: Lunch

Then went to: Work

Then went to: Off-site meeting

Then went to: Work

Then went to: Children's school

Then went to: Drug store

Ended day at: Home

« Previous Next »

Privacy Policy | Travel Log | Contact Us | FAQs

Questions or comments? Contact us at help@regionaltravelsurvey.com

34%

Once the trip roster was complete, the location for each place the respondent went on their travel day (located by searching for an address or placing a marker on a map) was geocoded in rSurvey using Google maps API. Respondents located each place that they listed in their rosters. The survey prepopulated previously geocoded locations (e.g., home, work, and school) reported in the recruit survey. This allowed the respondent to quickly confirm, rather than geocode, these locations. If the same place was visited more than once (e.g., dropping a child off at an activity and then picking them up from the same place later), that location was geocoded only once.

The Part 2 travel diary survey also collected details about each individual trip (Figure 5). Respondents could skip some questions (based on survey logic) if they were not relevant to a given trip.

- For **all** trips, respondents were asked about the following:
 - When they traveled (when they started traveling and when they arrived).
 - Activities at the destination of their trip (e.g., work at regular workplace, shop in store, eat a meal/have coffee or drink).
 - Travel mode (e.g., in a household or other vehicle, riding transit, walking).
 - Travel party (who they traveled with, like other household members, nonhousehold members, or a combination).
- For **auto** trips, respondents were asked about the following:
 - Type of vehicle used.
 - Type of parking location and parking payment method (if applicable).
 - Specific HOV lane, high-occupancy toll (HOT) lane, toll road/bridge, or ferry used on that trip (if applicable).
- For **carpool** trips (i.e., vehicle trips with other people in the travel party), respondents were asked about the following:
 - Whether they were the driver or passenger.
- For **transit** trips, respondents were asked about the following:
 - How they got to and from the transit stop.
 - Transit payment method.
 - Transit system(s) used.
- For **school bus** trips, respondents were asked about the following:
 - How they got to and from the bus stop.
 - Where they boarded the bus.

FIGURE 5: EXAMPLE SET OF TRIP DETAILS QUESTIONS

REGIONAL TRAVEL SURVEY | Planning Our Future Together

Please tell us about your trip from **HOME** to **KIM'S WORK**.

Time departed from **HOME**: 8:10 AM

Time arrived at **KIM'S WORK**: 8:35 AM

Other household members who traveled with you on this trip (select all that apply):

- ☐ David
- ☐ Tommy
- ☒ Just me (no other household members)

Number of people who traveled with you who are NOT household members (e.g., friends or co-workers): No other people

Primary activity at **KIM'S WORK**: Work at regular workplace or other work location

Additional activity at **KIM'S WORK**: Please select...

Viewing trip 1 of 7 trip(s).

My Travel Day

- Trip #1: HOME to KIM'S WORK
- Trip #2: KIM'S WORK to COFFEE
- Trip #3: COFFEE to KIM'S WORK
- Trip #4: KIM'S WORK to KIM'S WORK2
- Trip #5: KIM'S WORK2 to HOME
- Trip #6: HOME to T'S SOCCER PRACTICE
- Trip #7: T'S SOCCER PRACTICE to HOME

« Previous | Next »

Privacy Policy | Travel Log | Contact Us | FAQs

Questions or comments? Contact us at help@regionaltravelsurvey.com

56%

Importantly, respondents could also “copy” trips where only auto was selected as the mode and where they were reported as a member of the travel party with other household members. The first household member to complete the travel diary needed to report the full details of the auto trip, but if they indicated that other household members traveled with them, then those members only needed to confirm that they were on the trip (Figure 6) and update the trip purpose. For example, a parent driving a child to school would not have to re-enter details about travel time, mode, or destination when completing his or her child’s diary. Respondents could then add more places to the roster if the child made other trips on his or her own. At the request of MWCOG, the survey only permitted the “copy trips” functionality for auto trips. MWCOG was concerned that in the Metropolitan Washington region, household members might make trips together that have different destinations (e.g., a transit trip where one member exits the bus or subway at a different stop) and that using the copy trips functionality for trips other than auto may result in incorrect data being captured.

FIGURE 6: EXAMPLE COPY TRIP CONFIRMATION QUESTION

Please provide a response for each unanswered question.

Below is a list of trips that other household members reported making with Tommy. To make things easier, we can use the information they already provided if Tommy made these trips together.

Please confirm the trips that Tommy made.

Trip 1st Reported by	Start location	End location	Start time	End time	Traveled on Trip	Confirm
Kim	T'S SOCCER PRACTICE	HOME	7:05 PM	7:15 PM	Kim Tommy	<input checked="" type="checkbox"/>
None of the above						<input type="checkbox"/>

Next »

[Privacy Policy](#) |
 [Travel Log](#) |
 [Contact Us](#) |
 [FAQs](#)

Questions or comments? Contact us at help@regionaltravelsurvey.com

13%

At the end of the Part 2 survey, the RTS survey again prompted participants to recall if they forgot to report any trips and displayed the previously recorded trip roster. If the participant answered affirmatively, they were asked some high-level trip-reporting questions to capture these forgotten trips. Validation of these trip times within the original trip roster was not programmatically possible. These trips are stored in a separate table and are referred to as “missed trips.” It is RSG’s understanding that MWCOCG will combine these in the trip table prior to data weighting.

2.4 SURVEY INSTRUMENTS

Online Survey Instrument

RSG programmed an online survey instrument as the primary data retrieval option for respondents. rSurvey includes rigorous protocols to protect data during and after data collection. The survey, conducted over the internet, is hosted on a secure website; the rSurvey application uses Microsoft Azure to run the survey and store responses. Microsoft Azure employs numerous tools to ensure data security and data privacy.¹

All participant contact information was stored separately from response data to further protect respondent information; the only link between the mailed survey invitations and the survey

¹ Microsoft Azure has developed best practices in compliance with industry standards (such as ISO 27001) to ensure physical and virtual security such as security staff and cameras at physical server locations, antivirus scans on software, and encryption protocols to protect data in transit. For more information, please visit <https://azure.microsoft.com/en-us/support/trust-center/>.

responses was a unique, randomly assigned password provided to respondents in print materials and via email reminders. This password was only used for administering the survey. Participating households entered their unique password and completed the survey through the online survey portal, which was accessible from the survey website. Passwords were included in the final version of the datasets (as requested by MWCOG to better analyze nonresponse patterns). **RSG recommends that MWCOG remove passwords from the datasets prior to distribution outside of the agency to ensure that personal information is not inadvertently linked to survey responses.**

In addition to security, rSurvey prioritizes high data quality and low respondent burden. rSurvey directs participants who stop midway through the survey to the last question answered when they return to the survey (with all previously provided data saved). Other functionalities to ensure data consistency and minimize respondent burden include real-time data validation, which the following section describes.

Data Validation

Respondents provide more complete and accurate high-quality data if they understand the questions as they take the survey. rSurvey includes built-in descriptions and data checks to minimize respondent confusion. rSurvey is designed to maximize survey flow and minimize respondent burden. It verifies response completeness and consistency, facilitates dataset preparation, and reduces the amount of data cleaning and up-coding required. A few examples of these built-in data checks include the following:

- Validation logic required that respondents answer all questions on a page (where a response was required) before continuing the survey, ensuring complete response records.
- Spatial validation, such as real-time geocoding of addresses, businesses, or location points on a Google map, ensured complete geographic data.
- Reported trip sequences were required to be spatially and temporally logical (i.e., one trip's end location was required to match the next trip's starting location, and a trip's starting time could not be before the previous trip ended).
- Filters to automatically show or hide certain questions based on previous responses helped reduce respondent burden (e.g., unemployed respondents were not asked commuting questions).
- Metadata collection (passive collection of data such as survey duration and browser type) was used to help troubleshoot survey errors and assist households that called or emailed for help. These metadata helped inform improvements to the survey design between the pretest and main data collection periods.

3.0 SURVEY SAMPLING

MWCOG designed the sample plan for the RTS and provided sample to RSG in five waves. Sample plans typically identify key geographic, demographic, and travel characteristic segments by determining sampling targets and response rates for these segments. The sample plan was designed by MWCOG to evaluate response rates in selected areas throughout the region to inform main survey sample planning.

3.1 MAIN SURVEY SAMPLE PLAN

MWCOG developed the sampling plan and provided RSG with the list of household addresses for main survey data collection. MWCOG provided five address files—and the Arlington County add-on sample—during the survey. MWCOG evaluated response rates across regional jurisdictions (i.e., counties and cities) and within geographically defined strata, making refinements to fill in all sampling cells as the survey progressed. Wave one was evenly distributed proportionally by household population across the region to obtain accurate recruit, conversion, and completion rates across the region. Subsequent waves included more robust oversampling to ensure that hard-to-reach households (e.g., low-income, minority) were adequately represented in the dataset. Once the sample were received from MWCOG, RSG processed the sample into invitation groups (“letter weeks”) and preassigned the travel day of the week. There were 27 letter weeks throughout data collection, including two letter weeks for the Arlington County add-on. Table 1 shows the invitation, recruit, and completion results for each wave, including Arlington County add-on. A total of 355,941 households were invited to participate in the survey.

TABLE 1: HOUSEHOLD RESPONSE, BY SAMPLE SEGMENT

RESPONSE TYPE	WAVE ONE	WAVE TWO	WAVE THREE	WAVE FOUR	WAVE FIVE	ARLINGTON ADD-ON	TOTAL
Invited Households	107,673	77,744	88,876	23,184	29,966	12,631	355,941
Recruited Households	8,213	5,123	6,339	1,580	1,756	628	23,639
Recruit Rate ²	7.6%	6.6%	7.1%	6.8%	5.9%	5.0%	6.6%
Completed Households	5,816	3,547	4,332	1,103	1,178	512	16,488
Completion Rate ³	5.4%	4.6%	4.9%	4.8%	3.9%	4.1%	4.6%
Conversion Rate ⁴	71%	69%	68%	70%	67%	82%	70%

The number of mailings per wave varied, with a smaller number of mailings in wave four (summer) and wave five (targeted hard-to-reach cells), which was focused on filling in data gaps. Mail drops for each replicate were sent every other week from early October 2018 through early November 2019.

Maps shown in the remainder of this section depict the home, work, and school locations for recruited and completed households in the survey region and the TPB region.

² The recruit rate is calculated by dividing the number of households that completed the recruit survey (Part 1) by the number of households invited to participate (number of addresses that were sent mailed invitations)

³ The completion rate is calculated by dividing the number of households that completed the survey (i.e., all household members reported their travel on their assigned travel date) by the number of households invited to participate.

⁴ The conversion rate is calculated by dividing the number of households that completed the survey (Part 2) by the number of households that completed the recruit survey (Part 1).



3.2 RECRUIT LOCATIONS

FIGURE 7: HOME LOCATIONS FOR RECRUITED HOUSEHOLDS (SURVEY REGION)

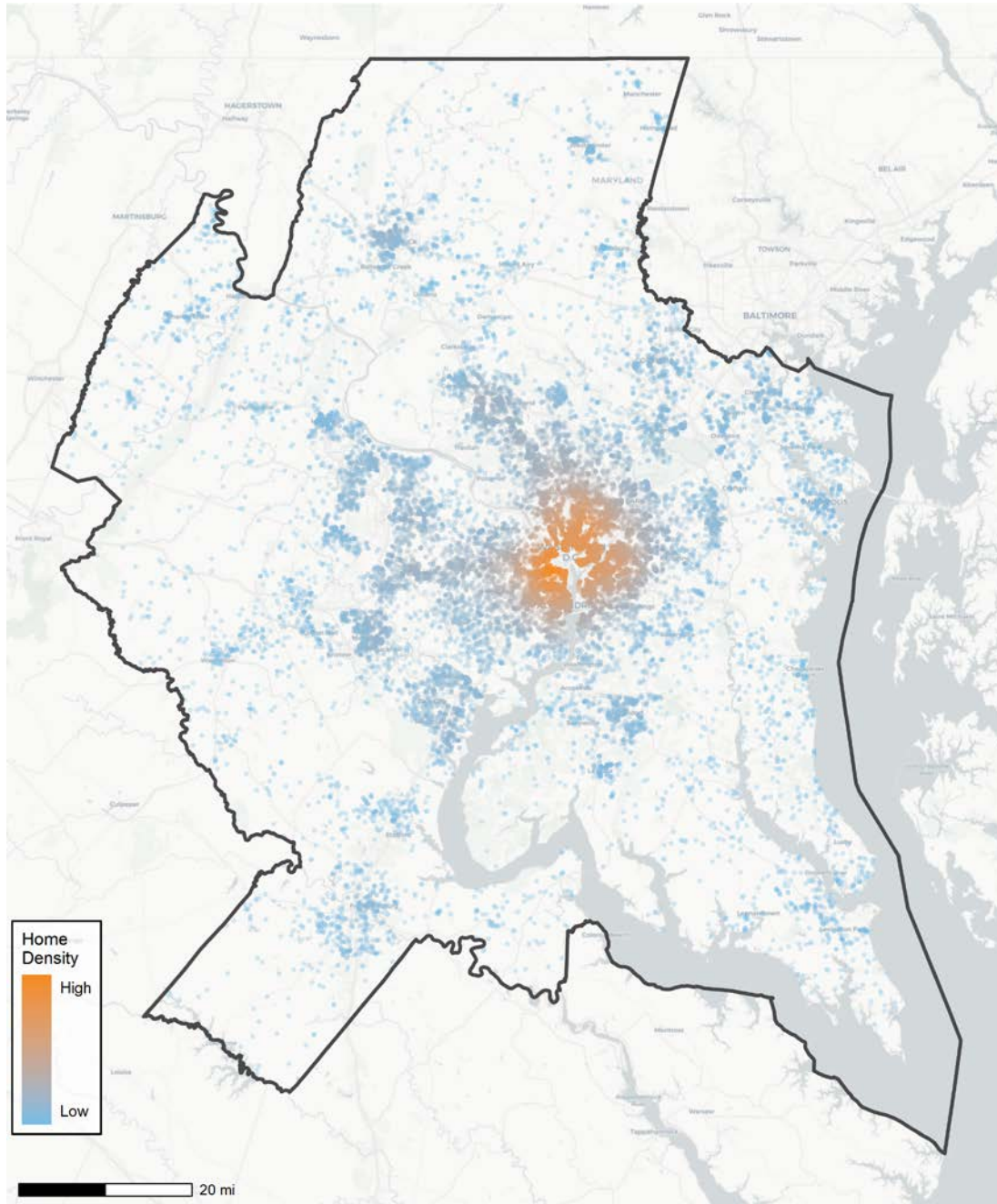


Figure 7 shows the home locations of the 23,639 recruited households within the survey region. Each point represents a survey household. Each point is colored using a kernel density estimation function (calculated using *kde2d* from the R package *MASS* and *interp.surface* from the R package *fields*), with orange representing a high density of home locations and blue representing a low density of home locations.

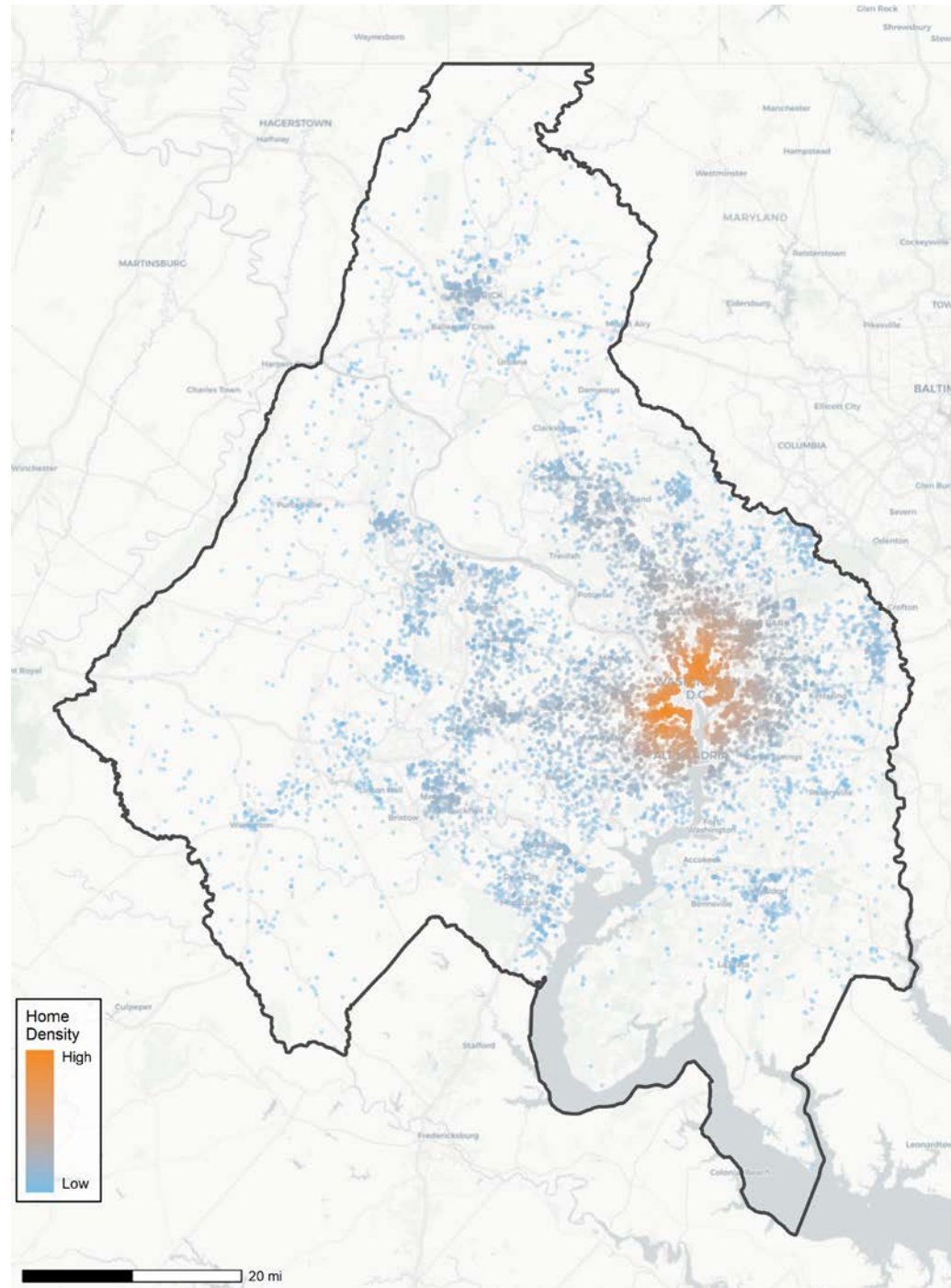
FIGURE 8: HOME LOCATIONS FOR RECRUITED HOUSEHOLDS (TPB REGION)

Figure 8 shows the home locations of the 19,783 recruited households within the TPB region. Each point represents a survey household. Each point is colored using a kernel density estimation function (calculated using *kde2d* from the R package MASS and *interp.surface* from the R package fields), with orange representing a high density of home locations, and blue representing a low density of home locations.

3.3 COMPLETED LOCATIONS FOR MODEL REGION

FIGURE 9: HOME LOCATIONS FOR COMPLETED HOUSEHOLDS (SURVEY REGION)

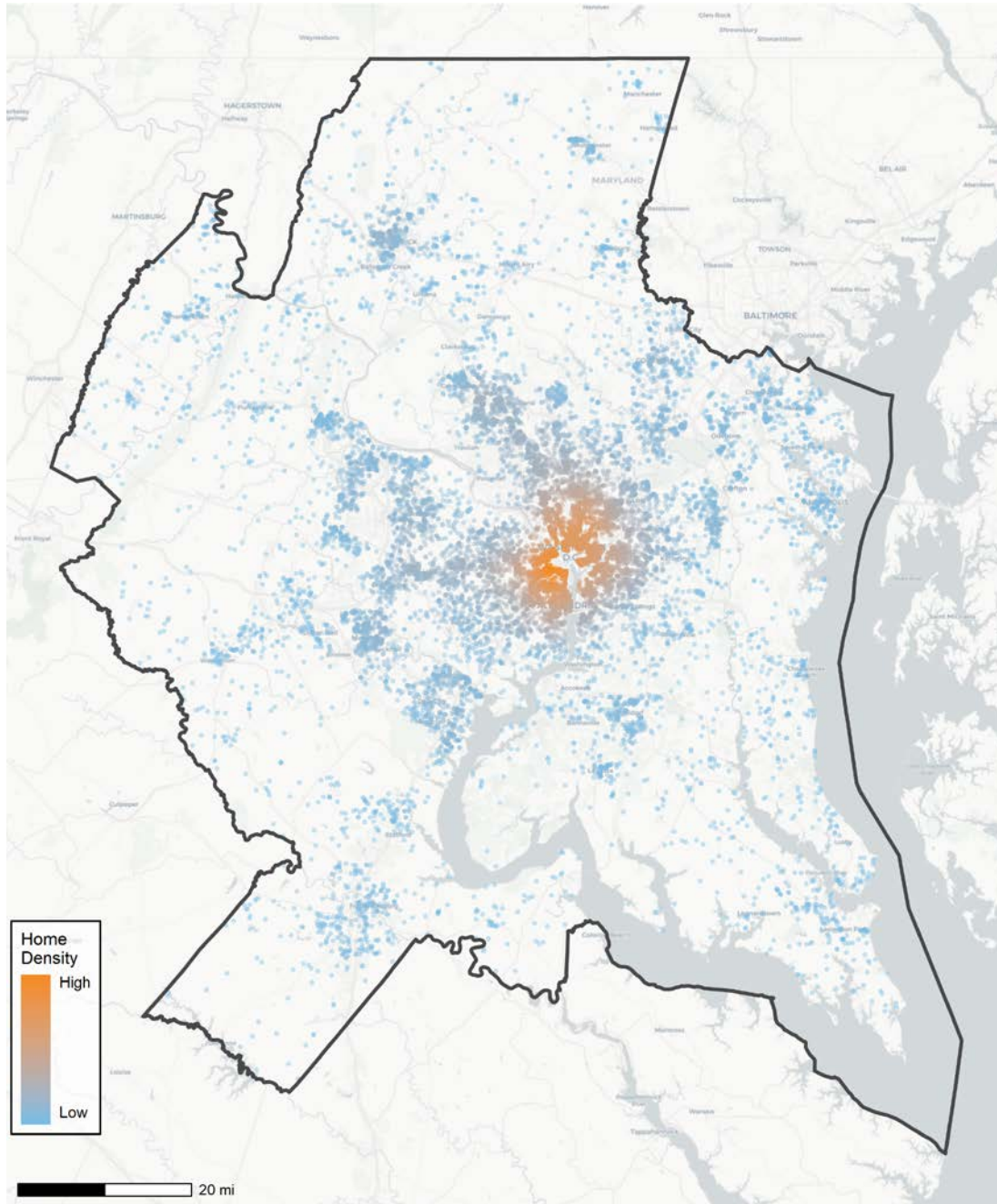


Figure 9 shows the home locations of the 16,488 completed households in the survey region. Each point represents a survey household. Each point is colored using a kernel density estimation function (calculated using `kde2d` from the R package `MASS` and `interp.surface` from the R package `fields`), with orange representing a high density of home locations, and blue representing a low density of home locations.

FIGURE 10: WORK LOCATIONS FOR COMPLETED HOUSEHOLDS (SURVEY REGION)

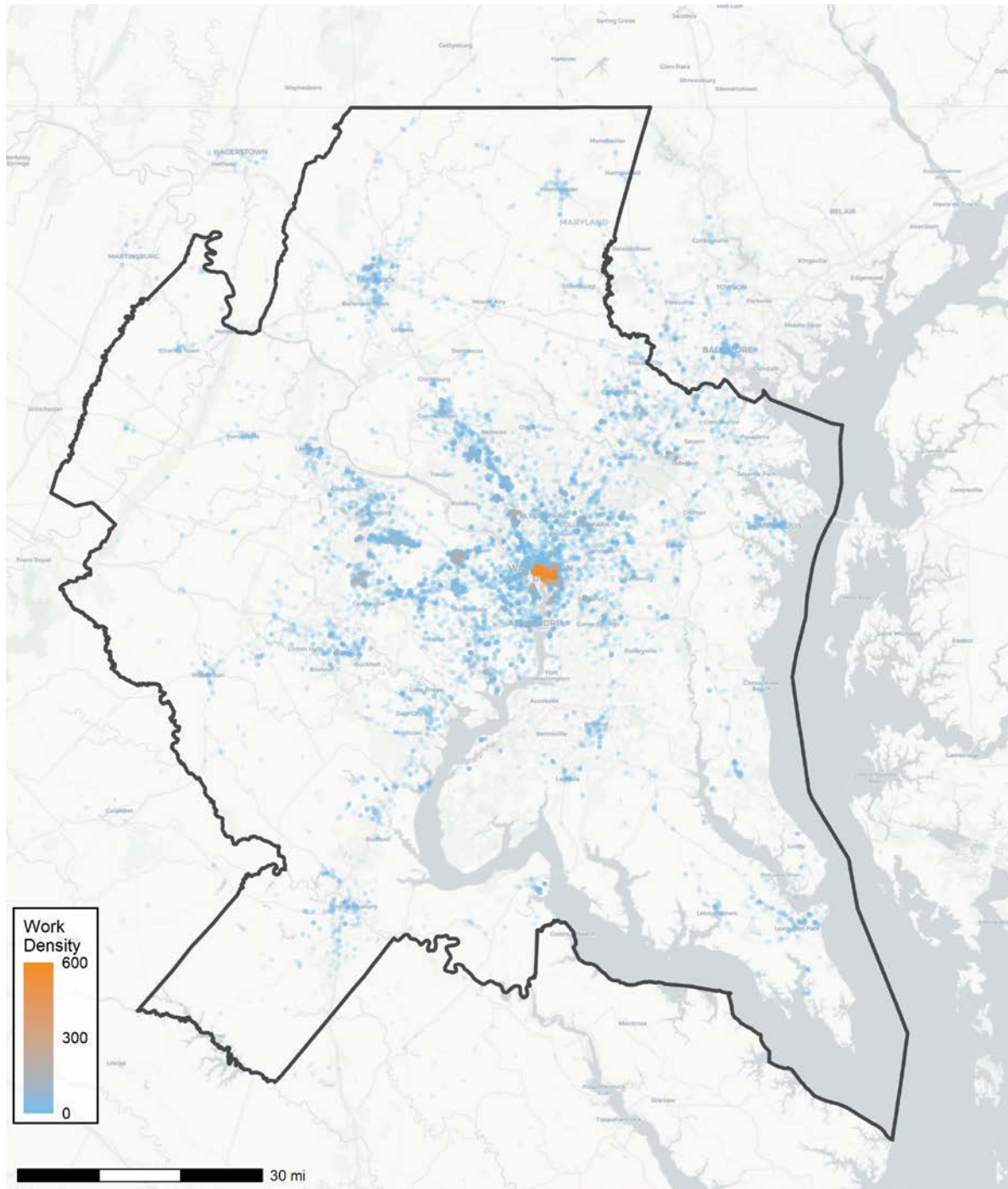


Figure 10 shows the primary work locations of the **18,252 persons from complete households in the survey region who had primary work locations available**. Each point represents a primary work location. Each point is colored by work location density, measured here with a count of survey work locations per block group. Orange represents a high density of work locations, while blue represents a low density of work locations.

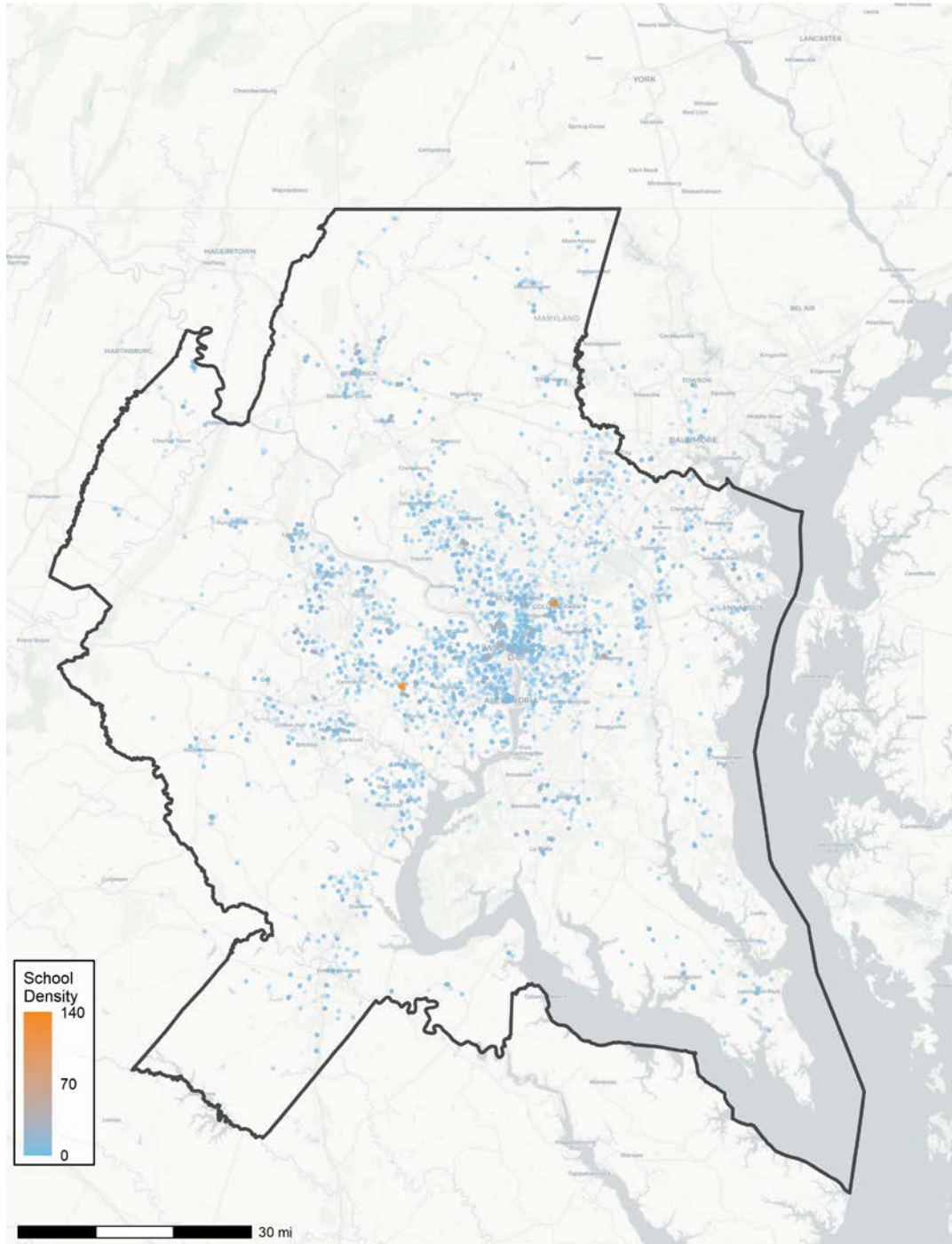
FIGURE 11: SCHOOL LOCATIONS FOR COMPLETED HOUSEHOLDS (SURVEY REGION)

Figure 11 shows the school locations provided by 6,756 persons from complete households in the survey region. Each point represents a school location. Each point is colored by school location density, measured here with a count of survey school locations per block group. Orange represents a high density of school locations, while blue represents a low density of school locations.

3.4 COMPLETE LOCATIONS FOR TPB REGION

FIGURE 12: HOME LOCATIONS FOR COMPLETED HOUSEHOLDS (TPB REGION)

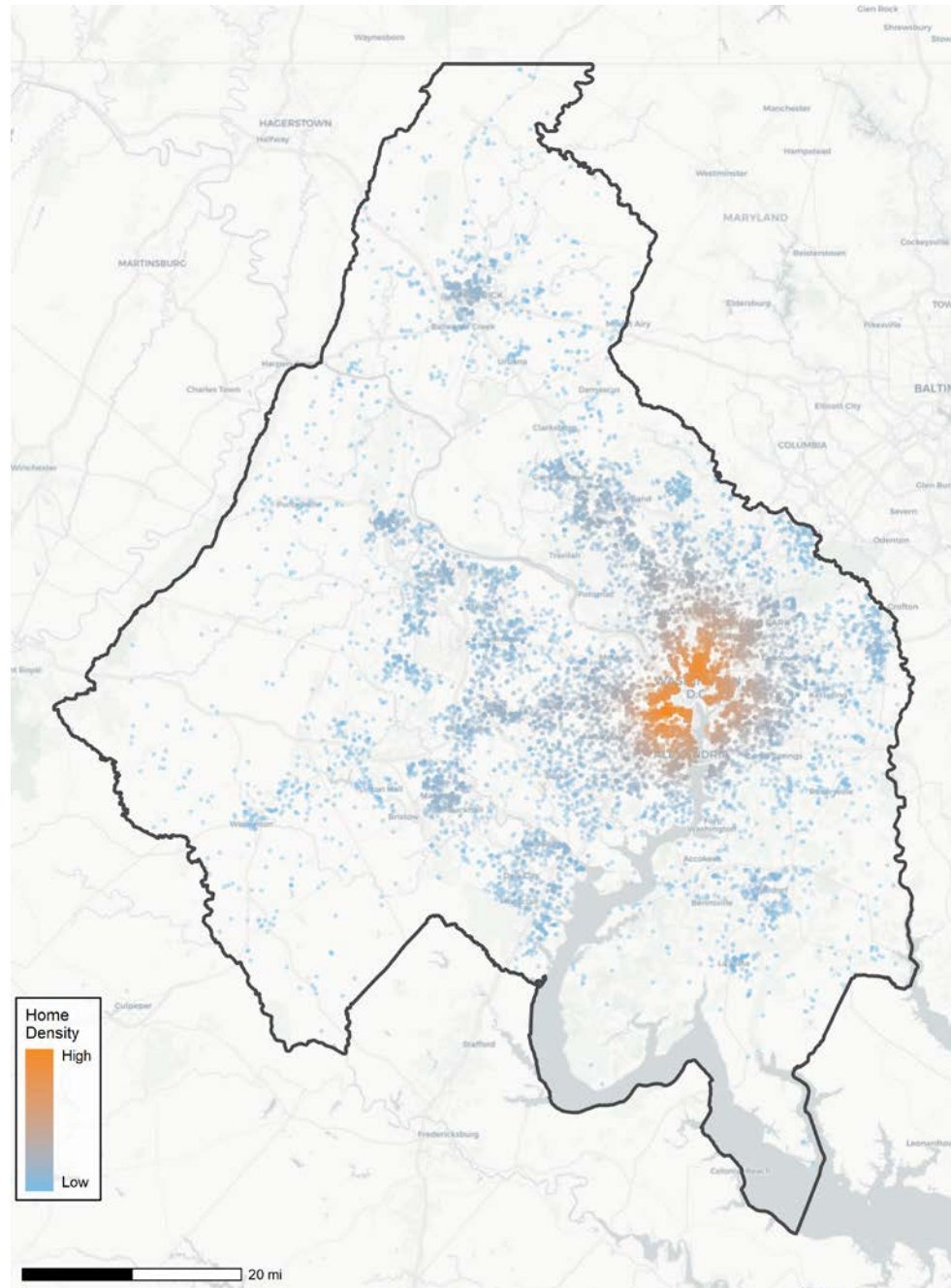


Figure 12 shows the home locations of the 13,853 complete households within the TPB region. Each point is colored using a kernel density estimation function (`kde2d` from the R package `MASS` and `interp.surface` from the R package `fields`), with orange representing a high density of home locations, and blue representing a low density of home locations.

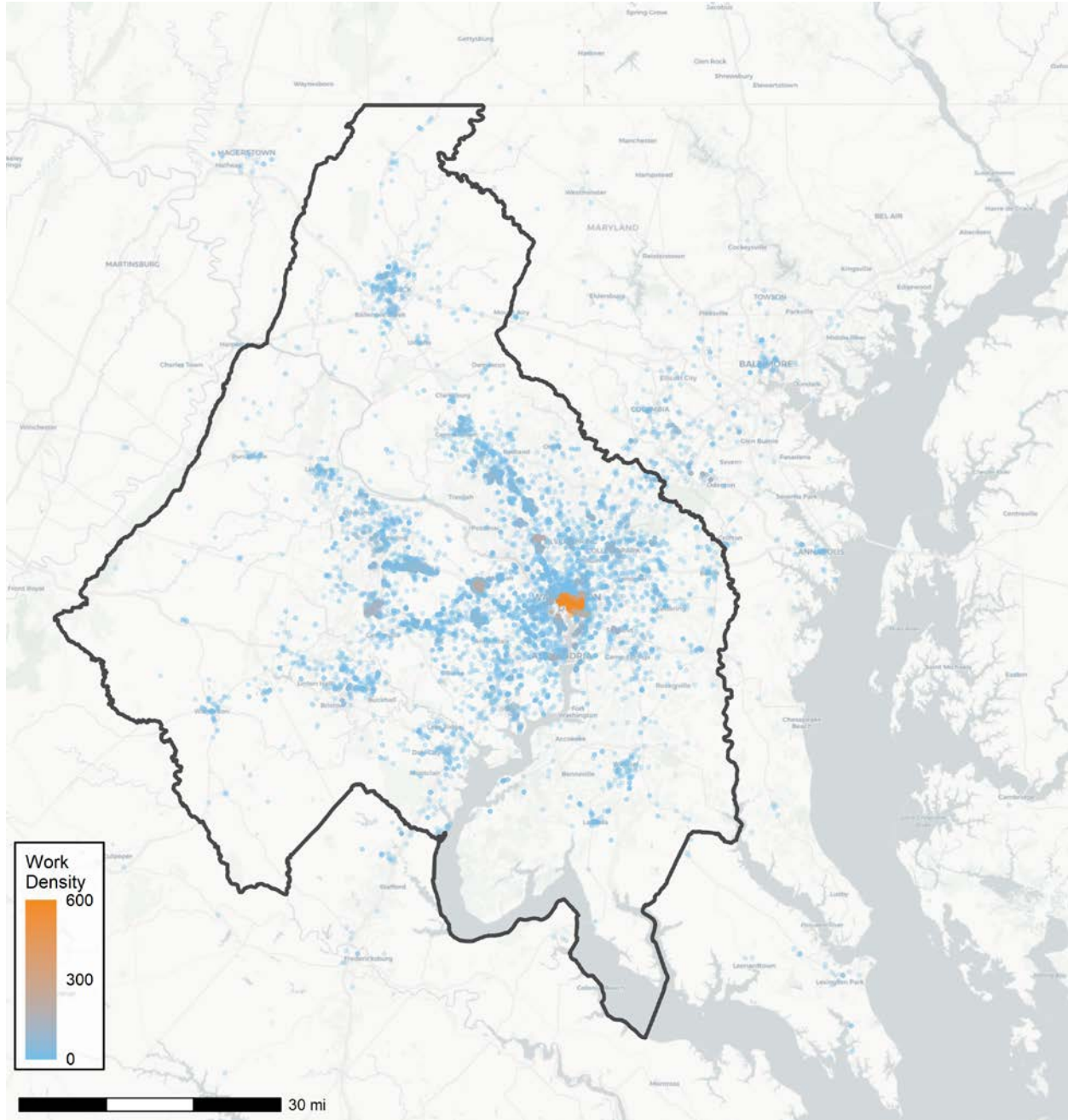
FIGURE 13: WORK LOCATIONS FOR COMPLETED HOUSEHOLDS (TPB REGION)

Figure 13 shows the primary work locations provided by the 15,370 persons in the TPB region. Each point represents a primary work location. Each point is colored by work location density, measured here with a count of survey work locations per block group. Orange represents a high density of work locations, while blue represents a low density of work locations.

FIGURE 14: SCHOOL LOCATIONS FOR COMPLETED HOUSEHOLDS (TPB REGION)

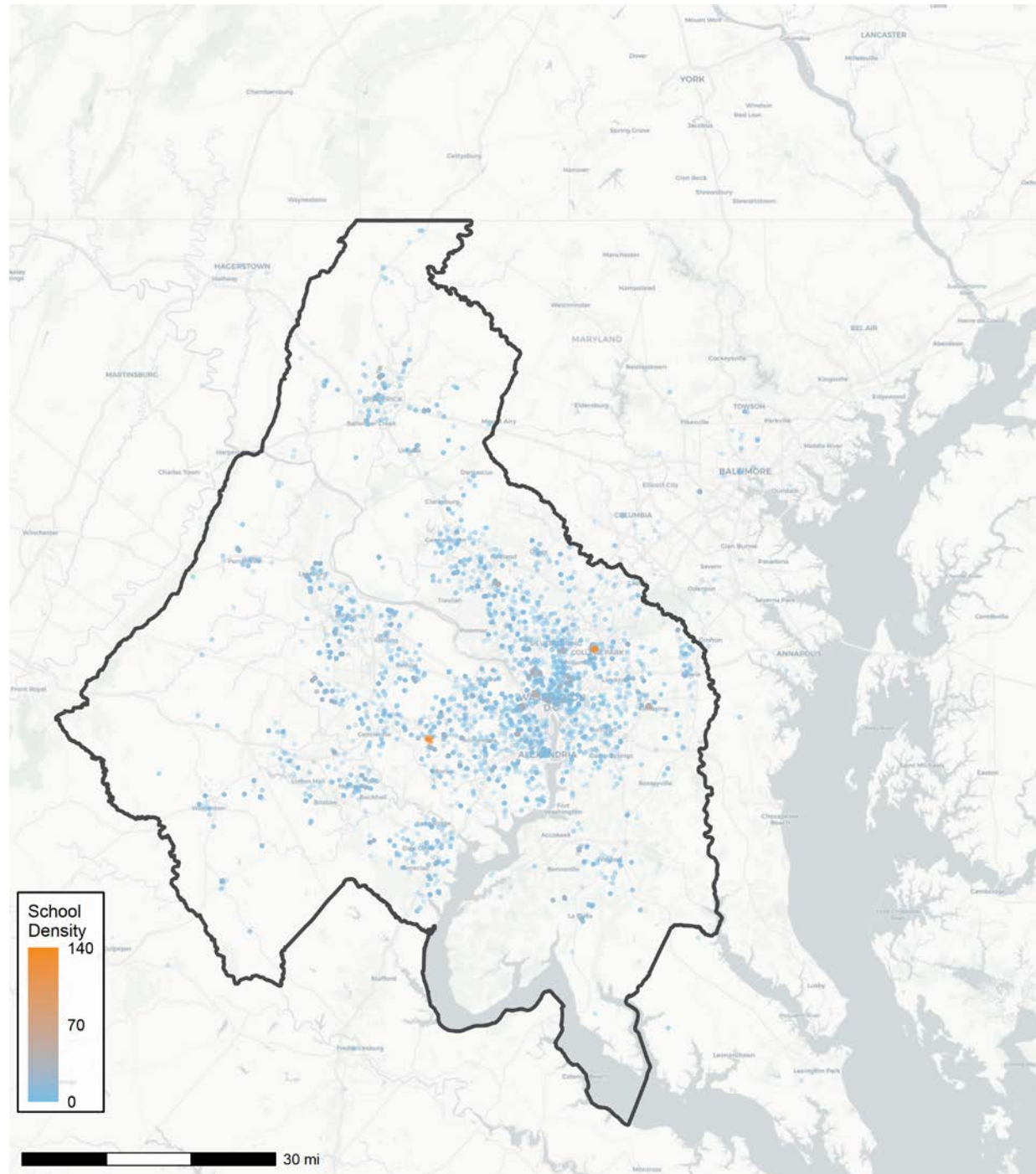


Figure 14 shows the school locations provided by 5,141 persons in the TPB region. Each point represents a school location. Each point is colored by school location density, measured here with a count of survey school locations per block group. Orange represents a high density of school locations, while blue represents a low density of school locations.

3.5 ARLINGTON COUNTY ADD-ON SAMPLE

Arlington County purchased additional household samples in the RTS to increase the sample size in specific neighborhoods and corridors of interest in Arlington County. The samples were collected using the same sampling methodology and survey design as the full RTS. MWCOG provided RSG with the address list for sampling. RSG then processed the sample into two invitation groups (“letter weeks”) and preassigned travel days. That sample plan provided by MWCOG estimated that 800 Arlington County households would complete the survey from the regional sample. Six hundred of those samples were estimated in the Arlington Activity Centers. To understand the behavior of Arlington’s Activity Centers in particular, Arlington County provided funding for up to 578 additional households with a total target sample size of 1,178 households in Arlington County Activity Centers. A total of 1,327 samples were collected, which exceeded the target by 149 households.

It was estimated that a total of 578 completed samples were needed in this oversample of Arlington Activity Centers (assuming MWCOG main sample hit its target of 600). Target geographic allocations were as follows:

- 78 households in the North Arlington Activity Centers (Rosslyn-Ballston Corridor).
- 500 households in the South Arlington Activity Centers, distributed to three corridors:
 - 254 in Columbia Pike.
 - 218 in Pentagon-Crystal City.
 - 28 in Shirlington.

RSG used the same Activity Center definitions/boundaries applied in the MWCOG regional sampling process. All survey materials and the data collection and tracking systems were consistent with materials and systems used for the RTS. A total of 512 household from the Arlington County add-on completed the survey. The response rate for the add-on was lower than MWCOG estimated. The lower response rate was likely due to several factors, including that the mailings were sent in the same timeframe of the national midterm elections and may have been mistaken for junk mail. The data collection time period also overlapped with the Thanksgiving holiday.

4.0 BRANDING AND SURVEY MATERIALS

4.1 SURVEY BRANDING

RSG designed custom survey branding with input from MWCOG. All survey resources and materials, including the survey website and print material, were branded to create a cohesive public profile for the survey. The first step in this process was to develop the survey name and logo (Figure 15). The survey name, Regional Travel Survey, represented the diverse/broad model region by not including “Washington” in the name. MWCOG made this decision so that households in counties well outside Washington, DC, would still participate in the survey. The logo was included on all official survey materials and the survey name, icons, fonts, and color schemes informed the design of all other aspects of the invitation and outreach materials.

FIGURE 15: SURVEY LOGO



4.2 PRINTED INVITATION MATERIALS

Invitations to participate in the RTS were delivered via United States Postal Service (USPS) First-Class Mail. Per MWCOG’s request, all mailings were addressed to “<insert mailing address city> Resident” (e.g., a household living in Arlington, VA, received materials addressed to “Arlington Resident”) regardless of whether the sample provider could attach a name to the sample address. Households received four mailings:

1. Invitation packet inviting them to participate in the survey.
2. Three reminder postcards.

In addition to the survey logo, the following sponsor logos were included on printed materials:

- National Capitol Region TPB.
- District Department of Transportation.
- Maryland Department of Transportation.
- Virginia Department of Transportation.
- Department of Rail and Public Transportation for the Commonwealth of Virginia.
- Washington Metropolitan Area Transit Authority.

The Baltimore Metropolitan Council (BMC) logo was included on print materials that were mailed to Anne Arundel, Carroll, and Howard counties, which are included in both the TPB and BMC model regions.

Table 2 shows the mail date for each mail type for the first three mail drops (replicates). Invitations were mailed on a rolling biweekly schedule.

TABLE 2: PRINTED INVITATIONS MAIL SCHEDULE

MAILING	1. INVITATION PACKET	2. REMINDER POSTCARD (ONE)	3. REMINDER POSTCARD (TWO)	4. REMINDER POSTCARD (THREE)
Mail Drop Date 1	Tuesday 10/3/2017	Tuesday 10/10/2017	Tuesday 10/24/2017	Tuesday 11/7/2017
Mail Drop Date 2	Tuesday 10/17/2017	Tuesday 10/24/2017	Tuesday 11/7/2017	Tuesday 11/21/2017
Mail Drop Date 3	Tuesday 10/31/2017	Tuesday 11/7/2017	Tuesday 11/21/2017	Tuesday 12/5/2017

All English printed invitation materials (detailed as follows) are available as an appendix (Appendix B), and Spanish materials are in Section 6.2:

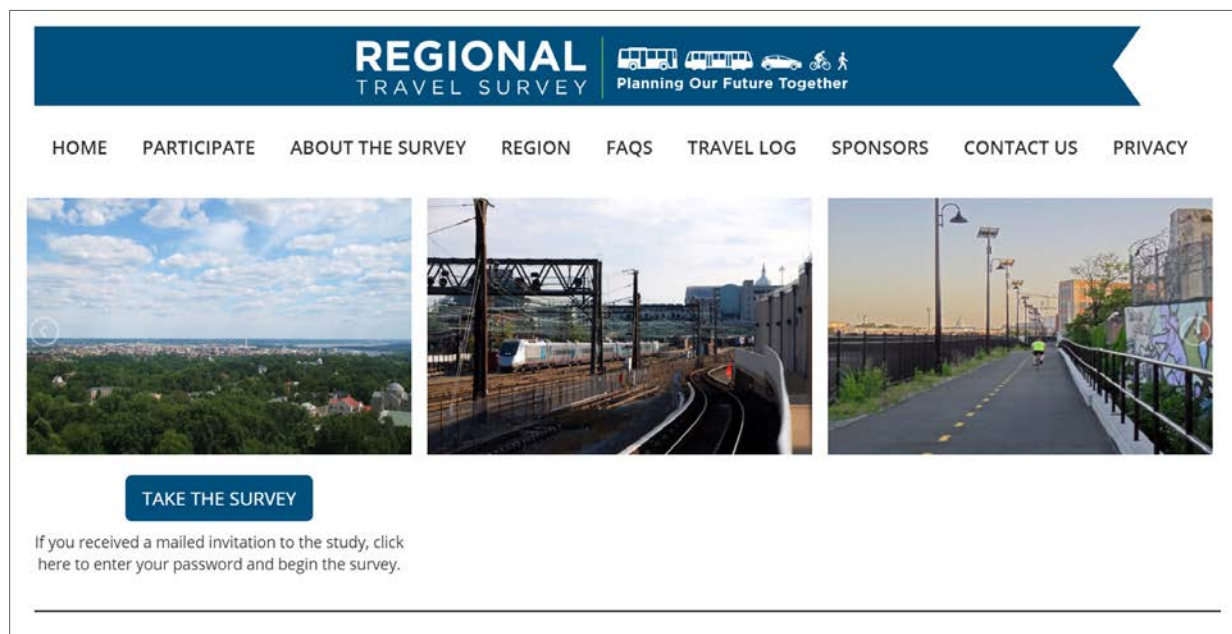
- **Formal Invitation Packet:** A formal invitation packet invited each household to the survey. The packet included a letter (branded with the survey logo and signed by the TPB chairperson) that explained the purpose for collecting residents' travel behavior and described the steps necessary to complete the survey (including reminders of the website address and phone number for providing responses). Other materials included in the invitation packet were two full-page, double-sided travel logs. Frequently Asked Questions (FAQs), which typically are included on the backside of the invitation letter, were excluded from the letter packet at the request of MWCOG (to allow space for a longer letter). However, these were available for download as a PDF on the survey website.
- **Reminder Postcard One:** A reminder postcard was mailed seven days after the invitation packet to encourage every household to complete the survey. It again provided the survey phone number, website address, and household login information.
- **Reminder Postcard Two:** A second reminder postcard was mailed 21 days after the previous reminder postcard as a reminder to participate. It had slightly different wording but was nearly identical to the first reminder postcard.
- **Reminder Postcard Three:** A third reminder postcard was mailed 35 days after the previous reminder postcard as a final reminder to participate. It had slightly different wording but was nearly identical to the first and second reminder postcards.

Only households that had not already recruited into the survey received reminder postcards. A local Post Office Box in Arlington, Virginia, was listed as the survey address on all print materials and was used as the return address for any invitations that were undeliverable. Returned mail counts were provided to MWCOG monthly to inform subsequent sample orders.

4.3 PROJECT WEBSITE

The project website served two purposes. First, the website was how respondents accessed the online survey instrument. Second, the website provided general information about the survey, including information about the survey region, answers to FAQs, and contact information for questions. The informational portion of the project website was available to anyone; the survey was only available to invited households who accessed it by using the household password on the printed materials. The home page of this website is shown in Figure 16.

FIGURE 16: SURVEY WEBSITE HOME PAGE



5.0 SURVEY ADMINISTRATION

As described in Section 4.2, respondents were recruited by USPS First-Class Mail. An overview of the participation process is described in this report section. All materials (both online and print) included a toll-free telephone number, the website URL, the survey email address, and the unique password assigned to each household.

5.1 SURVEY PARTICIPATION MODES

Online “Self-Administered” Survey

Households invited to take the survey could enter their unique password and complete the survey through the self-administered online survey instrument, which was accessible from the survey website and by telephone. For the main survey, 96% of participating households completed the recruit survey online and 93% of households completed all household member diary surveys online.

Telephone “Interviewer-Administered” Survey

Bernett Information Group Inc. (Bernett) was responsible for all telephone communications for the RTS. Bernett has staff dedicated to conducting objective, professional telephone surveys while capturing respondents' answers as fully as possible. Each telephone interviewer underwent training for the RTS, which included review of the online survey, print materials, and survey website. RSG provided training documents, including the questionnaire (screen by screen) for reference, guidelines for what operators should say, and a survey overview workbook for quick reference while on the phone. Bernett fielded incoming calls and made outbound calls to households with a known phone number. Households could call to participate over the phone or call with specific questions. Respondents who preferred to complete their survey over the phone were read the same web-based survey that web participants used, as described in previous sections. Both English and Spanish speaking interviewers were available to assist callers.

5.2 RESPONDENT COMMUNICATION

Email and telephone communication activities (e.g., response to respondent inquiries, email reminders) were directed toward invited households and meant to encourage complete survey participation. The survey website and mailed participation materials provided most information about the survey. Households reported their preferred method of survey communication (email or phone) during the recruitment survey.

Telephone Communication

Telephone communication for the survey consisted of these call types that were prioritized by RSG:

1. Returns of inbound calls from participants.
2. Day before travel period reminder calls.
3. Day after travel period reminder calls.
4. Three days after travel period reminder calls.
5. Five days after travel period reminder calls.
6. Recruit calls (dropped early in the survey).

Inbound Telephone Calls from Respondents

Bernett operators responded to all inbound telephone calls, including questions and requests to complete the survey over the phone. If an operator did not know the answer to a question or needed more information, then the Bennett supervisor contacted RSG for guidance. In cases where a participant was having trouble completing the survey, the interviewer would help them complete the survey over the phone. Calls from households who wanted to report their travel on their travel date (rather than on the day after) were scheduled for callback.

Outbound Telephone Reminders

Households that preferred receiving reminders via telephone were contacted through the following process:

- A telephone call was placed to the household on the day before their travel period to remind the household to track their travel the following day.
- Additional calls were placed (for up to five days after the travel period) to households assigned to use rSurvey for Part 2 to remind them to complete the survey online or over the telephone.
- Once five days after the travel period had passed, no additional phone calls were placed to that household.

Scripted voice messages were left if an operator reached a voice mailbox instead of a live person.

Email Communication

Outbound Email Reminders

RSG sent email reminders to households that had completed the Part 1 Recruit Survey and had provided an email address and requested email reminders. Email reminders encouraged rSurvey participants to log in and report trips for their assigned travel date; these emails also described the reporting process. Reminders included a link to the survey website, the household

password, the FAQs, and the toll-free telephone number. Households received up to five reminder emails depending on when they recruited and when they completed Part 2 of the survey:

- **Reminder 1:** Sent immediately after completing Part 1 so the household had a record of their assigned travel period and password.
- **Reminder 2:** Sent the day before the assigned travel period (reminder to log travel the following day).
- **Reminder 3:** Sent the morning after the assigned travel period (reminder to report travel from the previous day).
- **Reminder 4:** Sent three days after the travel period (*only if travel had not yet been reported*).
- **Reminder 5:** Sent five days after the travel period (*only if travel had not yet been reported*).

Inbound Emails from Respondents

RSG received participant support emails from 1,088 survey participants. Inquiries sent via email most often were about gift cards. Others were requests for help with the survey or general comments or questions about the survey. Occasionally, households emailed comments about regional transportation issues, which were passed along to MWCOC. Table 3 has a breakdown of emails, by topic.

TABLE 3: RTS NUMBER OF INBOUND EMAILS, BY TOPIC

EMAIL SUBJECT	COUNT	PERCENTAGE
Incentives	533	49%
User errors/questions	183	17%
General comments/questions	148	14%
Missed travel date/out of town	95	9%
Lost password	65	6%
Unsubscribe requests	51	5%
Privacy concerns	13	1%
Total	1,088	100%

5.3 SURVEY INCENTIVES

Households completing Part 2 were offered a \$20 incentive (one incentive per household), contingent on the entire household's completion of the survey. Each household was asked their incentive preference at the end of the Part 1 survey. Incentives options were as follows:

- Amazon e-gift card.
- Walmart e-gift card.
- Walmart physical gift card.
- Donation to the American Red Cross.
- None, prefer not to receive a gift card or donate.

Table 4 shows the distribution of incentive types selected by complete households. Most households preferred the Amazon e-gift card. Eight seven percent of households preferred to receive their gift card via email. Eleven percent of households requested that the American Red Cross receive their incentive, resulting in over \$37,800 in donations.

TABLE 4: HOUSEHOLDS, BY INCENTIVE TYPE

INCENTIVE TYPE	COMPLETE	PERCENTAGE
Amazon gift card (delivered by email)	10,408	63%
Walmart gift card (delivered by email or physical mail)	3,990	24%
Donate participation gift to the American Red Cross	1,892	11%
None, prefer not to receive a gift card or donate	198	1%
Total	16,488	100%

6.0 TARGETED HISPANIC OUTREACH

By the spring of 2018, analysis of survey data confirmed that households in geographic areas that had the highest concentrations of households with one or more Latino/Hispanic members were completing at lower-than-desired rates. In addition to sending additional survey invitations to these areas, the survey team determined that targeted outreach was needed.

To boost participation from this important demographic, MWCOG recommended that Casa de Maryland join the survey team. Casa de Maryland suggested the Spanish translation of the survey instrument, all print materials, and the website. They further recommended that RSG mail Spanish-only print materials to households in geographies with a large percentage of isolated Spanish speakers and offered to provide a letter of support for the RTS. The survey logo, shown in Figure 17, was created by RSG with input from Casa de Maryland and MWCOG.

FIGURE 17: SPANISH RTS LOGO



6.1 CASA DE MARYLAND GUIDANCE

To assist with encouraging Hispanic households to participate in the RSG, Casa de Maryland completed the following tasks:

- Reviewed the Spanish translation for the RTS print materials that were mailed to households in census block groups with high concentrations of Latino/Hispanic households.
- Developed a short cover letter on Casa de Maryland letterhead to include with RTS mailing materials (Figure 18) explaining the importance of this survey to the Latino/Hispanic community and encouraging participation in this survey.
- Provided Casa de Maryland logo for use on all print materials.
- Provided Casa de Maryland staff assistance to participants requesting help in completing the RTS online.
- Provided staff assistance at Casa de Maryland's office to walk-ins who had questions about the survey or needed help completing the survey.
- Provided a computer station at Casa de Maryland's office to enable invited survey participants to complete the survey online.

6.2 HISPANIC OUTREACH MATERIALS

FIGURE 18: CASA DE MARYLAND LETTER OF SUPPORT

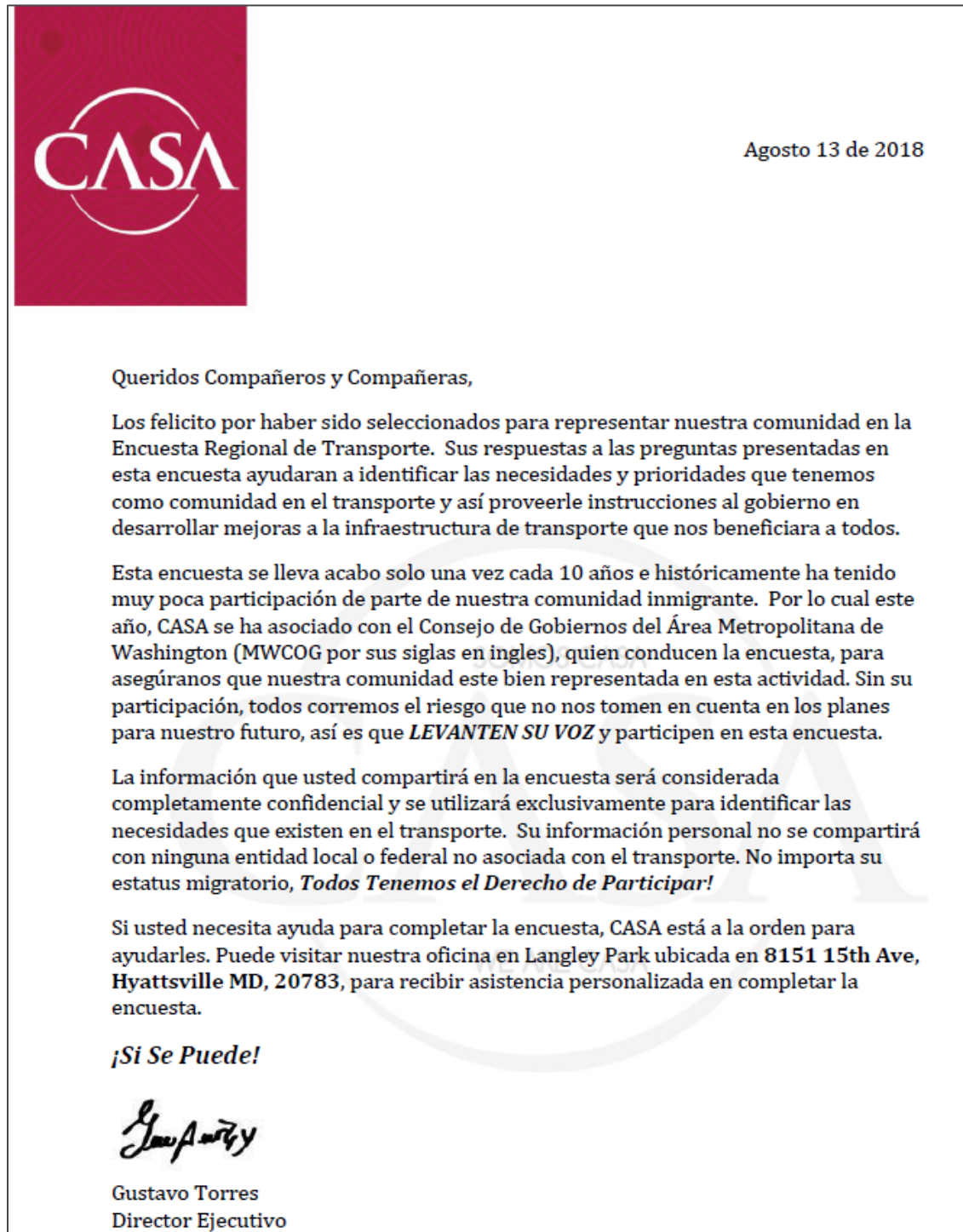



FIGURE 19: SPANISH INVITATION LETTER

ENCUESTA

REGIONAL DE TRANSPORTE



Planeando nuestro futuro juntos

<addressee>
 Street Address 1
 Street Address 2
 City, State ##### >

<Letter Date>

Querido <Destinatario>.

Si los miembros de su hogar viajan mucho, poco, o nada, de igual manera sus respuestas a la Encuesta Regional de Transporte nos ayudarán a planear mejoras en el transporte para su comunidad. Dependiendo de los resultados de esta encuesta, las mejoras podrían incluir reparaciones a carreteras, instalaciones, servicios de tránsito, rutas para bicicleta y aceras.

Le agradecemos su participación en esta encuesta:

- **¡Levante su Voz!** Su hogar fue seleccionado de forma aleatoria para representar a otros hogares de su comunidad. Esta encuesta se lleva a cabo solo una vez cada diez años.
- **Reciba una tarjeta de regalo de \$20** (de Amazon o Walmart) o una donación a la Cruz Roja Americana como agradecimiento por su participación.
- **Estricta confidencialidad.** No se compartirá con nadie su información personal, ni importa su estatus migratorio. La información de la encuesta se agregará a los datos y se usará únicamente para propósitos estadísticos.
- **¿Necesita ayuda en completar la encuesta?** Visítenos en CASA en el 8151 15th Ave, Hyattsville, MD 20783 para recibir asistencia en persona.

¿CÓMO PARTICIPAR?


PARTE 1: Inicie la encuesta en línea con su teléfono inteligente o tableta, o vía telefónica con la contraseña que se le proporciona abajo. En la Parte 1 de esta encuesta le harán preguntas acerca de su hogar y su transporte diario.

Sitio web de la encuesta: **RegionalTravelSurvey.com**

Contraseña: <dynamically inserted>

Línea telefónica gratuita: 1 (855) 762-5057 (Lunes a viernes de 9 AM – 9 PM hora del Este [Eastern Time, ET]; sábados de 10 AM – 6 PM ET; domingos de 12 PM – 6 PM ET, o deje un mensaje donde especifique el mejor momento para devolverle la llamada).

Avalado por



National Capital Region
Transportation Planning Board


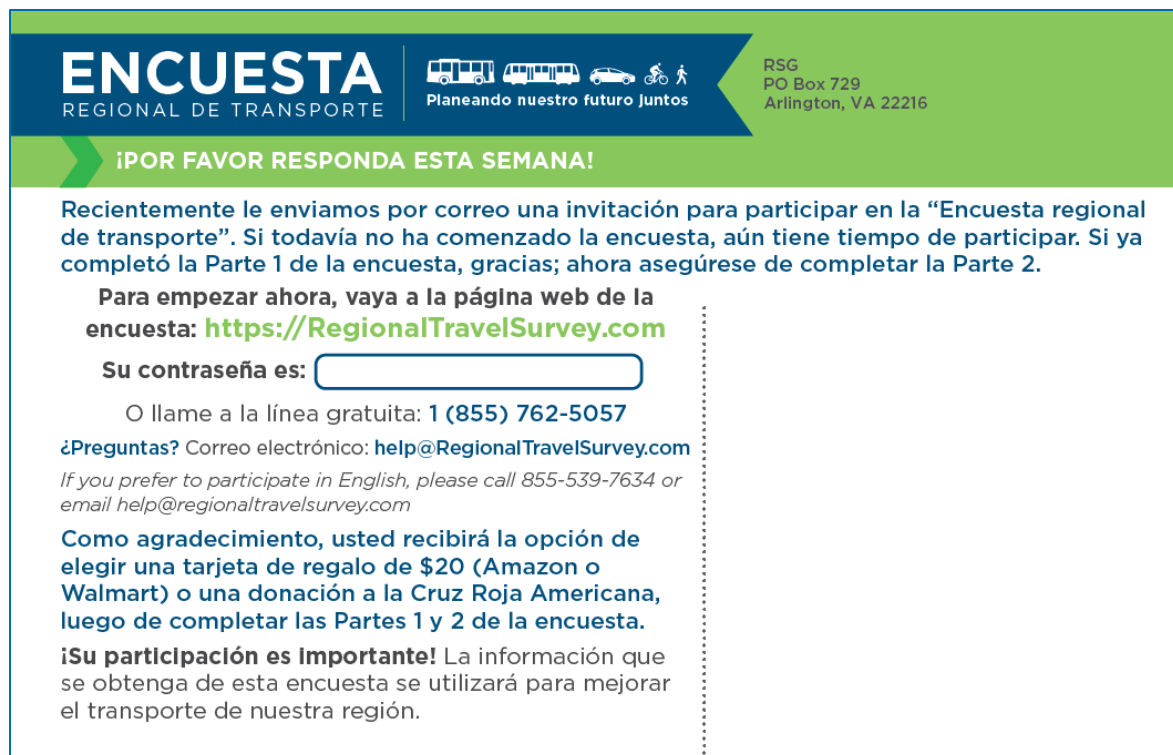


FIGURE 20: SPANISH REMINDER POSTCARD (FRONT)



FIGURE 21: SPANISH REMINDER POSTCARD (BACK)



7.0 DATA PROCESSING AND PREPARATION

RSG conducted data quality assurance and quality checks during all stages of the project, from questionnaire and survey design to final deliverables. RSG reviewed and cleaned responses during and after data collection to ensure the quality of the final data. This process included reviewing response frequencies for consistency; mapping location data; flagging, correcting, or excluding records with survey errors; and deriving key variables for downstream data uses. This section discusses the data preparation process and summarizes steps taken to prepare the final datasets.

7.1 QUALITY CONTROL AND DATA CHECKS

Real-Time Quality and Logic Checks

Collecting and preparing accurate, high-quality survey data requires that respondents understand the questions and provide complete, accurate data as they take the survey. rSurvey includes built-in data checks that reduce respondent confusion, verify response completeness and consistency, facilitate dataset preparation, and reduce the amount of data cleaning and up-coding required. A few examples of these real-time built-in data checks include the following:

- Validation logic required that respondents answered all questions on a page before continuing the survey (preventing skipped questions).
- Logic checking, or hiding/skipping questions or answer choices that are not relevant (e.g. not asking employment questions for children), also helped to reduce respondent burden.
- Filters to automatically show or hide certain questions based on previous responses helped reduce respondent burden (e.g., unemployed persons were not asked commuting questions).
- Metadata collection (passive collection of data such as survey duration and browser type) was used to help troubleshoot survey errors and assist households that called or emailed for help. These metadata helped inform improvements to the survey design between the pretest and main data collection periods.
- The “copy trips” feature in rSurvey allowed a household member to select and copy information already reported by another household member if the other household member had previously reported making the trip together and if auto was the only mode selected. This feature, described in more detail in the previous section on survey design, ensures that jointly made household trips in a vehicle were reported with the same locations, modes, and trip times.
- Reported trip sequences were required to be spatially and temporally logical (i.e., one trip’s end location was required to match the next trip’s starting location, and a trip’s starting time could not be before the previous trip ended).

In addition to the real-time quality controls used during data collection, RSG conducted several additional quality checks and cleaning procedures after data collection was completed. These checks and cleaning procedures confirmed that the real-time controls worked correctly and consistently and evaluated any data questions that were not resolved by real-time rules.

Geographic Data Checks

Geographic data checks included review of the address and coordinate data recorded passively by rSurvey during data collection. During data collection, rSurvey used the Google Maps API Distance Matrix Service to estimate distance and travel time between a trip's origin and destination points. Geocoding of addresses, businesses, or location points on a Google map ensured complete geographic data. These estimates indicated the distance and duration of a trip under standard driving directions during free flow travel conditions and allowed comparisons to the self-reported trip duration. All but a few trips returned Google distance and time estimates—those trips where a driving time and distance estimate were not provided (or could not be driven to by road (e.g., boat, airplane or off-road trips, or trips to a military base on private roads)).

7.2 DATASET PREPARATION

After data collection was completed, RSG conducted several additional quality checks and cleaning procedures to confirm that the QA/QC measures worked correctly and consistently, and to evaluate any data questions that were not resolved by real-time rules.

Exclusion Criteria

- All reviewer households (any records from TPB/MWCOG, project subconsultants, or RSG reviewers) and their associated person, vehicle, and trip records were removed by RSG and documented in the dataset guide.
- Email addresses and phone numbers (collected for survey administration only). Personally identifiable information data are not provided.



2200 Wilson Boulevard, Suite 410
Arlington, VA 22201-3324
888.774.5986
www.rsginc.com



White River Junction &
Burlington, VT



Arlington, VA



Chicago, IL



Evansville, IN



Portland, OR



Salt Lake City, UT



San Diego, CA

RSG promotes sustainable business practices that minimize negative impacts on the environment. We print all proposals and reports on recycled paper that utilizes a minimum of 30% post-consumer waste. RSG also encourages recycling of printed materials (including this document) whenever practicable. **For more information on RSG's sustainability practices, please visit www.rsginc.com.**

REGIONAL TRAVEL SURVEY



Regional Travel Survey
PO Box 729
Arlington, VA 22216

<addressee>
Street Address 1
Street Address 2
City, State #####>

<Letter Date>

Dear <addressee> Resident,

An efficient and effective transportation system is essential for access to jobs, schools, health care, and travel for other important daily activities. To determine the types of transportation improvements most needed in our region, we need to better understand how people use the system today.

Whether your household travels a lot, just a little, or not at all, your responses to this survey will help us better plan future transportation improvements. This includes enhancements to roads, transit facilities and services, bike routes, and sidewalks. Your household's responses will also help us ensure that future transportation investments are targeted to where they are most needed and efficiently sized to meet these needs.

We are asking for your help in this important task. The National Capital Region Transportation Planning Board has been carrying out this survey once every decade since 1968. Its results have informed hundreds of important decisions that have led to the transportation system we have today. Your household has been randomly selected to participate in the 2017-2018 version of this once-in-a-decade survey. **As one of a small sample selected to participate, your household's responses will have a large impact in helping us identify the current travel needs of persons living in your local community.**

WHAT ARE WE ASKING OF YOU?

PART 1: Start the survey online with the password provided below. This part of the survey will ask questions about your household and your typical travel. You can also complete the survey by phone using the number below. We ask you to complete Part 1 this week!

Survey website: RegionalTravelSurvey.com

Password: <password>

Toll-free number: 1 (855) 539-7634 (9 AM – 9 PM ET on weekdays, 10 AM – 6 PM ET on Saturday and Noon – 6 PM ET on Sunday or leave a message with the best time to call you back)

Si desea obtener información en español, por favor comuníquese al 1 (855) 539-7634 o help@RegionalTravelSurvey.com

PART 2: Record your travel for the assigned 24-hour period. We will assign your household a specific day during which you will keep a "travel diary." Each member of your household should track their trips and activities on your assigned travel date. Use the enclosed Travel Logs to remember the details of each trip. After your travel date has passed, please log in online or call us to complete Part 2 of the survey. It is important in this survey that we

capture actual day-to-day variations in regional travel patterns. *Please report your actual travel on your assigned travel day, even if your travel on your assigned date was not typical.*

As a thank you for your participation, **your household will receive your choice of a \$20 gift card** (Amazon or Walmart) or a gift donation to the American Red Cross once each member of your household has completed Part 2 of the survey.

Confidentiality is critical to the success of our survey, and we want you to feel secure in sharing information about your travel. Be assured that your privacy is protected and all the information your household gives to us will be held in strict confidence. If you would like more information on our privacy policy, visit RegionalTravelSurvey.com/privacy.

If you have any other questions, please see the Frequently Asked Questions at RegionalTravelSurvey.com/faqs or call Ken Joh, the Regional Travel Survey Project Manager, at 202-962-3276, or email him at kjoh@mwkog.org.

Thank you in advance for your participation and for helping improve transportation in the region. Your input will really make a difference.

Sincerely,



Charles Allen
2018 Transportation Planning Board Chairman

STUDY OVERVIEW

This study
has 2 parts

1

Who takes
the survey?

You

When do I take
the survey?

Now, or as soon
as convenient

How long
will it take?

About 10 minutes

What is the
survey about?

Basic information
about your household
and your household's
typical travel

2

After your assigned
travel day:

All household members
are asked to report their
trips (an adult should
report trips for children
under 16).



National Capital Region
Transportation Planning Board



Sponsored by



Secure survey website: <https://RegionalTravelSurvey.com> | Call: 1 (855) 539-7634

COMPLETING PART 2 OF THE SURVEY:

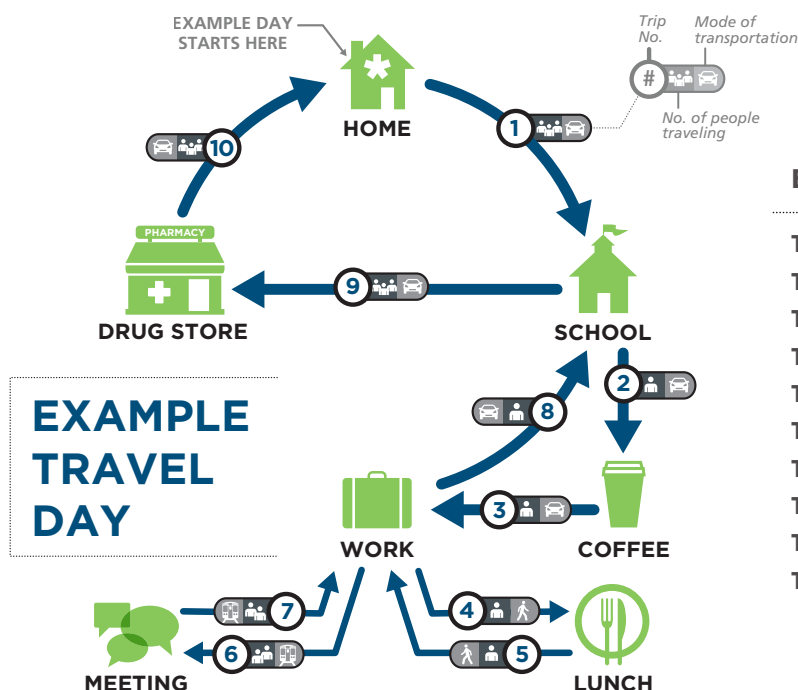
On your assigned travel day: On the back of this page is a Travel Log to assist your household in completing Part 2 of this survey. It may be helpful for each member of your household age 16 or older to use a copy of this Travel Log to record each place traveled to on your household's assigned travel day. Additional copies of this Travel Log may be downloaded from RegionalTravelSurvey.com or obtained by calling 1 (855) 539-7634. *Note: **Your travel day begins at 3 AM** on your assigned day and ends 24 hours later. For many people, the first trip begins when they leave home in the morning.*

After your assigned travel day: Please log on to the secure survey website using the password provided in the letter to report all of your household's trips and activities on your assigned travel day. An adult household member should report all trips and activities for children in the household under age 16. If you prefer not to use the secure survey website, you may instead call us at 1 (855) 539-7634 to report your household's travel and activities.

What is a trip? A trip is anytime you travel from one place and stop at a new place. Even if you stop briefly for gas, at an ATM, to drop a child off at school, or to pick up something to eat or drink, travel to that place counts as one trip, and travel from that place to the next place counts as a separate trip. All trips you make between places whether by driving, walking, biking, transit, or using any other mode of travel are important to us.

What if I don't drive or travel very often? Whether your household travels a lot, just a little, or not at all, your responses to this survey will help us better understand transportation needs. Information about the amount of your household's daily travel will help ensure future transportation improvements are efficiently sized to meet these needs.

What if my travel on my assigned date isn't "typical" – should I still participate? Yes, please report what actually happens on your assigned travel day. Even if your travel on your assigned date may not be "typical," it is important for transportation planners to understand day-to-day variations in regional travel patterns. In Part 1 of the survey, we ask you about your household's "typical" travel.



Example Travel Day Trips

- Trip 1: Drive children to school
- Trip 2: Stop to get coffee at convenience store
- Trip 3: Drive to work
- Trip 4: Walk across street to lunch
- Trip 5: Walk back to work
- Trip 6: Take subway to a meeting
- Trip 7: Take subway back to work
- Trip 8: Drive to pick up children at school
- Trip 9: Stop at drug store
- Trip 10: Drive home

REGIONAL TRAVEL SURVEY



Planning Our Future Together

TRAVEL LOG

Name Travel Date MM / DD / YYYY Password

		Place	Address, Intersection, or Business Name	When did you start your trip?	When did you get there?	Traveled with?	What activities did you do there?
Example	Began the day at: (place at 3AM)	Home	_____	_____	_____	_____	1
Example	Then went to:	Child's School	Luther Jackson Middle School, Falls Church, VA	7:20AM	7:25AM	Chris, Sandy	6
Example	Then went to:	Primary Workplace	ICMA, 777 North Capitol St NE, Washington, DC	7:30AM	8:25AM	Sandy	3, 6
Trip 1	Began the day at: (place at 3AM)						
Trip 2	Then went to:						
Trip 3	Then went to:						
Trip 4	Then went to:						
Trip 5	Then went to:						
Trip 6	Then went to:						
Trip 7	Then went to:						
Trip 8	Then went to:						
Trip 9	Then went to:						
Trip 10	Then went to:						
Trip 11	Then went to:						
Trip 12	Then went to:						

ACTIVITY CODES

- 1 - At home activity (typical household responsibilities/relax/sleep)
- 2 - Work at home or telework (for pay)
- 3 - Work at regular workplace or other work location
- 4 - Work-related activity (e.g., meeting, conference, sales call)
- 5 - Volunteer activity
- 6 - Drop off/pick up someone
- 7 - Attend school/class as a student
- 8 - Attend other school-related activity

- 9 - Receive childcare or preschool services
- 10 - Receive adult care services
- 11 - Shop in store (for groceries, clothing, other goods)
- 12 - Eat a meal/have coffee or drink (outside of home or work)
- 13 - Quick stop to pick up food or coffee
- 14 - Fuel vehicle/get gas
- 15 - Receive healthcare services (e.g., medical, dental, etc.)
- 16 - Receive personal services (e.g., banking, dry cleaning, grooming, pet care, automotive service)

- 17 - Entertainment (e.g., movies, plays, concerts)
- 18 - Socialize (e.g., visit friends/relatives)
- 19 - Recreation (e.g., sporting event, visit parks or museums, vacation)
- 20 - Exercise (e.g., gym, jog/run, bike ride, walk dog)
- 21 - Governmental, civic, or religious activity
- 22 - Mail package/letter or other postal activity
- 23 - Change travel mode (e.g., wait for plane, inter-city train, or bus)
- 24 - Other _____

Secure survey website: <https://RegionalTravelSurvey.com> | Call: 1 (855) 539-7634

This sheet is for your use only. We do not need you to return this form. Please report trips online or over the phone.

REGIONAL TRAVEL SURVEY



Planning Our Future Together

REMINDER: You can still participate!

HELP IMPROVE TRANSPORTATION IN OUR REGION!



National Capital Region
Transportation Planning Board



Sponsored by



REGIONAL TRAVEL SURVEY



Planning Our Future Together

Regional Travel Survey
c/o RSG
PO Box 729
Arlington, VA 22216

PLEASE RESPOND THIS WEEK!

We recently mailed you an invitation to participate in the Regional Travel Survey. If you haven't started the survey yet, you still have time to participate. If you already completed Part 1 of the survey, thank you, please make sure to complete Part 2 of the survey.

To start now, go to the survey website:

<https://RegionalTravelSurvey.com>

Your password is:

Or, call toll-free: **1 (855) 539-7634**

Questions? Email: help@RegionalTravelSurvey.com

Si desea obtener información en español, por favor comuníquese al 1 (855) 539-7634 o help@RegionalTravelSurvey.com

As a thank you, your household will receive your choice of a \$20 gift card (Amazon or Walmart) or a gift donation to the American Red Cross after you complete Parts 1 and 2 of the survey.

Your input is important! Information collected in this survey will be used in planning future transportation improvements in our region.

REGIONAL TRAVEL SURVEY



Planning Our Future Together

STILL TIME TO PARTICIPATE!



National Capital Region
Transportation Planning Board



Sponsored by



REGIONAL TRAVEL SURVEY



Planning Our Future Together

Regional Travel Survey
c/o RSG
PO Box 729
Arlington, VA 22216

PLEASE RESPOND THIS WEEK!

About three weeks ago, we mailed you an invitation to participate in the Regional Travel Survey. If you haven't started the survey yet, you still have time to participate. As a thank you, your household will receive your choice of a \$20 gift card (Amazon or Walmart) or a gift donation to the American Red Cross after completing Parts 1 and 2 of the survey.

To start now, go to the survey website:

<https://RegionalTravelSurvey.com>

Your password is:

Or, call toll-free: 1 (855) 539-7634

Questions? Email: help@RegionalTravelSurvey.com

Si desea obtener información en español, por favor comuníquese al 1 (855) 539-7634 o help@RegionalTravelSurvey.com

Your input is important! Information collected in this survey will be used in planning future transportation improvements in our region.

REGIONAL TRAVEL SURVEY



Planning Our Future Together

STILL NEED YOUR HELP!



National Capital Region
Transportation Planning Board



Sponsored by



REGIONAL TRAVEL SURVEY



Planning Our Future Together

Regional Travel Survey
c/o RSG
PO Box 729
Arlington, VA 22216

PLEASE RESPOND THIS WEEK!

More than a month ago, we mailed you an invitation to participate in the Regional Travel Survey. We still need more responses from residents in your community. If you haven't started the survey yet, you still have time to participate. As a thank you, your household will receive your choice of a \$20 gift card (Amazon or Walmart) or a gift donation to the American Red Cross after completing Parts 1 and 2 of the survey.

To start now, go to the survey website:

<https://RegionalTravelSurvey.com>

Your password is:

Or, call toll-free: 1 (855) 539-7634

Questions? Email: help@RegionalTravelSurvey.com

Si desea obtener información en español, por favor comuníquese al 1 (855) 539-7634 o help@RegionalTravelSurvey.com

Your input is important! Information collected in this survey will be used in planning future transportation improvements in our region.

REGIONAL TRAVEL SURVEY



Planning Our Future Together

Regional Travel Survey
c/o RSG
PO Box 729
Arlington, VA 22216



National Capital Region
Transportation Planning Board



Sponsored by



REGIONAL TRAVEL SURVEY



Planning Our Future Together

Regional Travel Survey
c/o RSG
PO Box 729
Arlington, VA 22216



National Capital Region
Transportation Planning Board



Baltimore
Metropolitan
Council

Sponsored by

FREQUENTLY ASKED QUESTIONS

ABOUT THE REGIONAL TRAVEL SURVEY

▼ What is the Regional Travel Survey all about?

The purpose of the survey is to better understand daily travel and activities in the region: how we travel, where we go, how long it takes us, and what we do when we arrive. We want to obtain a complete picture of travel patterns in the region.

▼ How was I selected to participate?

Invited households (like yours) were randomly selected from all residential addresses in the region.

▼ Why should I participate?

The information gathered from this survey will be used to understand transportation needs and plan for future transportation improvements. By participating, you ensure that your local needs are accurately represented. Your responses will have a large impact because your household is one of a small number selected to participate.

TAKING THE SURVEY

▼ What do I get for participating?

As a thank you for your participation, your household will receive your choice of a \$20 gift card (Amazon or Walmart) or a \$20 gift donation to the American Red Cross once each member of your household has completed Part 2 of the survey.

▼ What if I don't drive or travel very often?

Whether your household travels a lot, just a little, or not at all, your responses to this survey will help us better understand transportation needs. Information about the amount of your household's daily travel will help ensure future transportation improvements are efficiently sized to meet these needs.

▼ What if my travel on my assigned date isn't "typical" - should I still participate?

Yes, please report what actually happens on your assigned travel day. Even if your travel on your assigned date may not be "typical," it is important for transportation planners to understand day-to-day variations in regional travel patterns. In Part 1 of the survey, we ask you about your household's "typical" travel.

▼ Why is my household assigned a specific travel date?

We are asking for information about the travel made by each person in your household on one day. We call this your "travel day" or "travel date". This helps us develop a full picture of all the travel that happens across the region on each weekday (even if it is not a "typical" travel day).

▼ What do I use the "Travel Log" for?

It may be helpful for each member of your household (age 16 or older) to use a copy of the [Travel Log](#) to record each place traveled to on your assigned travel day. Additional copies of the Travel Log are available [here](#) or may be obtained by calling 1 (855) 539-7634.

▼ What is a trip?

A trip is anytime you travel from one place and stop at a new place. Even if you stop briefly for gas, at an ATM, to drop a child off at school, or to pick up something to eat or drink, travel to that place counts as one trip, and travel from that place to the next place counts as a separate trip. All trips you make between places whether by driving, walking, biking, transit, or using any other mode of travel are important to us.

▼ Should my children participate?

Yes, trips to and from school, sports practice, play dates, and other activities help us understand the full nature of how the transportation system is used, and how it can be improved. Please note that adults will need to record (or remember) the trips their children take that day.

▼ Who should be counted as a member of my household?

Your household includes yourself, all other adults, all children, and all roommates who normally reside with you in your home. Please do not include people who are currently living away from home (e.g., living at college, active duty, and stationed elsewhere).

SURVEY RESULTS

▼ How is my personal privacy protected?

All of your data is strictly confidential. Your information will be grouped with travel data from other households and will not be analyzed individually. Please see our [privacy policy](#) for more information.

▼ How is this survey different than others I may have been invited to complete?

This is a once-in-a-decade regional transportation survey that will help shape important decisions for transportation improvements in our region. Other studies you may have been invited to participate in either collect data nationally (not just our region) or focus on a narrow topic (e.g., bus improvements).

▼ How will the survey results be used?

The results of this survey will be used to plan and evaluate future transportation improvements in our region.

REGIONAL TRAVEL SURVEY



[HOME](#) • [PARTICIPATE](#) • [ABOUT THE SURVEY](#) • [TRAVEL LOG](#) • [REGION](#) • [FAQS](#) • [SPONSORS](#) • [CONTACT US](#) • [PRIVACY](#)



TAKE THE SURVEY

If you received a mailed invitation to the study, click here to enter your password and begin the survey.

“Placeholder for quote of support”

Example Public Official

PARTICIPATE

Take the survey.

If you received information about this study in the mail, use the password you were provided to log into the secure survey website.

Password:

Log In

Lost your Password?

If you have misplaced the invitation with your password, please [contact us](#) and we can retrieve it for you.

Prefer to take the survey by telephone?

If you prefer not to use the secure survey website, you may instead call us toll-free at 1 (855) 539-7634 to participate. [Your privacy is secure.](#)

You have attempted to enter this survey using an invalid password.

If you feel you have reached this page in error, please email us at help@RegionalTravelSurvey.com or call us at 1 (855) 539-7634 and we can assist you.

If you received information about this study in the mail, use the password you were provided to log into the secure survey website.

Password:

Log In

REGIONAL TRANSPORTATION PLANNERS NEED YOUR HELP

To determine the types of transportation improvements most needed in our region, information on current daily household travel activity and travel patterns is needed.

Your responses to this survey will help us better plan future transportation improvements. This includes enhancements to roads, transit facilities and services, bike routes, and sidewalks.

ONCE IN A DECADE OPPORTUNITY

The National Capital Region Transportation Planning Board has conducted this type of household travel survey once every decade since 1968. This is your opportunity to participate and help planners understand how daily travel patterns and needs in our region are changing.

For more information about this survey, please visit [Frequently Asked Questions](#) or [contact us](#).

SURVEY NEWS

D.C. Region Transportation Census Wants To Know How You Get Around

A transportation census is underway for the Washington metropolitan area. [Read the Article.](#)

From *The Washington Post*: How has commuting in our area changed in 50 years? Lots of ways, not all good.

I like the word Robert Griffiths uses to describe commuting in the Washington area: “robust.” [Read the Article.](#)

Planning Our Future Together: Celebrating 50 Years of the TPB

The TPB was created... to establish a "continuing, comprehensive and coordinated" transportation planning process in every urbanized area in the United States.

[Watch the Video](#)

Once-in-a-decade Regional Travel Survey kicks off

By fall 2018, approximately 15,000 randomly selected

Participants, don't forget to use your Travel Log!

It may be helpful for each member of your household (age 16 or older) to use a copy of the Travel Log to record each place traveled to on your assigned travel day. Additional copies of the Travel Log may be downloaded here or obtained by calling 1 (855) 539-7634.

[Download Travel Log](#)

Note: The Travel Log is for your use only. We do not need you to return this form. Please report trips online or over the phone.

ABOUT THE REGION

Our Travel Survey region covers a wide geographic area stretching from the Chesapeake Bay in the east to the Blue Ridge Mountains in the west and from Southern Maryland and the Fredericksburg, VA area in the south and to the Pennsylvania border in the north. The District of Columbia and many other local jurisdictions and communities in Maryland, Virginia, and West Virginia, shown on the map to the right, are all included in this Travel Survey Region.



FREQUENTLY ASKED QUESTIONS

ABOUT THE REGIONAL TRAVEL SURVEY

What is the Regional Travel Survey all about?

The purpose of the survey is to better understand daily travel and activities in the region: how we travel, where we go, how long it takes us, and what we do when we arrive. We want to obtain a complete picture of travel patterns in the region.

How was I selected to participate?

Invited households (like yours) were randomly selected from all residential addresses in the region.

Why should I participate?

The information gathered from this survey will be used to understand transportation needs and plan for future transportation improvements. By participating, you ensure that your local needs are accurately represented. Your responses will have a large impact because your household is one of a small number selected to participate.

FREQUENTLY ASKED QUESTIONS

TAKING THE SURVEY

What do I get for participating?

As a thank you for your participation, your household will receive your choice of a gift card (Amazon or Walmart) or a gift donation to the American Red Cross once each member of your household has completed Part 2 of the survey.

What if I don't drive or travel very often?

Whether your household travels a lot, just a little, or not at all, your responses to this survey will help us better understand transportation needs. Information about the amount of your household's daily travel will help ensure future transportation improvements are efficiently sized to meet these needs.

What if my travel on my assigned date isn't "typical" – should I still participate?

Yes, please report what actually happens on your assigned travel day. Even if your travel on your assigned date may not be "typical," it is important for transportation planners to understand day-to-day variations in regional travel patterns. In Part 1 of the survey, we ask you about your household's "typical" travel.

What do I use the "Travel Log" for?

It may be helpful for each member of your household (age 16 or older) to use a copy of the [Travel Log](#) to record each place traveled to on your assigned travel day. Additional copies of the Travel log are available ([here](#)) or may be obtained by calling 1 (855) 539-7634.

FREQUENTLY ASKED QUESTIONS

SURVEY RESULTS

How is my personal privacy protected?

All of your data is strictly confidential. Your information will be grouped with travel data from other households and will not be analyzed individually. Please see our [privacy policy](#) for more information.

How is this survey different than others I may have been invited to complete?

This is a once-in-a-decade regional transportation survey that will help shape important decisions for transportation improvements in our region. Other studies you may have been invited to participate in either collect data nationally (not just our region) or focus on a narrow topic (e.g., bus improvements).

How will the survey results be used?

The results of this survey will be used to plan and evaluate future transportation improvements in our region.

SURVEY SPONSORS



District Department
of Transportation



Maryland Department of
Transportation



Virginia Department of
Transportation



National Capital
Region Transportation
Planning Board



Virginia Department of Rail
and Public Transportation



Washington
Metropolitan Area
Transit Authority

CONTACT US

For questions about the study and participation:

Email us at help@RegionalTravelSurvey.com

Call us toll-free at 1 (855) 539-7634

- Monday to Friday, 9 AM to 9 PM
- Saturday, 10 AM to 6 PM
- Sunday, Noon to 6 PM
- Or, leave a message with the best time and number for us to return your call.

For more information:

Please contact the Regional Travel Survey Project Manager, Ken Joh.

Email: kjoh@mwkog.org

Call: (202) 962-3276

PRIVACY

We are committed to respecting your privacy and this survey employs industry standard safeguards to protect the confidentiality of your personal information. Your responses to this survey will be combined with the responses from other survey participants and used for aggregate statistical purposes by transportation planners, researchers, and policymakers. Any personal information you provide about your household whether by computer, telephone or smartphone app will be held strictly confidential. We will never sell your personal contact information to any third party.

Your participation in this survey is important to us, but is entirely voluntary. We will make every reasonable effort to protect the confidentiality of your responses to this survey as permitted by law. If you have any questions on this privacy policy, please contact us by phone at 1-(855) 539-7634 or email at help@RegionalTravelSurvey.com.

Notes for reviewers

This questionnaire provides the text that survey participants will see, including survey information, instructions, questions, and answer choices.

A few tips and notes to keep in mind while reviewing this document:

- **Each slide represents one page in the survey.** Typically there is one question per page (or screen), though in some cases a few shorter questions may be asked of respondents on a single page.
- **Slides with a gray background (such as this one) are not shown to survey respondents.** These gray slides include notes, instructions for programming the survey, or longer lists of answer choices.
- In the comments section below each slide, each page name is shown between [] square brackets (e.g., [intro]). Reviewers should use these page names when providing feedback on the survey.
- **Text between < > angle brackets indicates information displayed dynamically** for each respondent (e.g., a household's travel date or the nickname of the person answering a survey)
- Text written in **Red** indicates notes for programming the survey such as survey logic (e.g., who should see or skip certain questions). These notes are not be shown to respondents.
- Other colored text indicates items that are highlighted for respondents as seen on screen
 - Text written in **green** indicates words that are highlighted onscreen (in that color) to emphasize different questions or instructions
 - Underlined text written in **blue** indicates words or phrases that are hyperlinks (pop-up descriptions, survey information pages, contact links, etc.)

Environment & Administration

Metadata is background data collected (but not explicitly asked) in the survey. The majority of this data is not included in the final dataset (to protect participant privacy), but it can be used to help troubleshoot if a participant has a technical problem.

- Web Browser / browser version
- Mobile device manufacturer
- Mobile device model
- Is mobile device
- Platform
- IP address
- Screen Resolution
- Browser default language

Response value coding

The majority of categorical question responses are recorded with a numeric code matching the order that they are displayed, unless a different value or display order is specified. The values are not shown to respondents.

Additionally, value codes for a few common responses are used for consistency, including:

996 Not applicable

997 Other

998 Don't Know

999 Prefer not to answer

Entry page

Entry page will display the entry page image and include the 'Privacy' and 'Contact us' links in the footer.
Entry page image will be 800x600px

Until 12:01 AM October 3, 2017, the password box and 'begin' button will be hidden and a message will be displayed informing people that the Survey will start soon and inviting them to check back or email with questions. After the survey is open, the message will be removed and the password box and "begin" button will be visible.



Footer

(content shown at the bottom of every page in the survey)

[Privacy](#) [Contact us](#) [Travel Log](#) [FAQs](#)

- Privacy – clicking ‘Privacy’ will open the Privacy page on the survey website in a new tab.
- Contact us – clicking ‘Contact us’ will open an email to the help address with subject line “User:<password>”
- Travel Log – clicking ‘Travel Log’ will open the Travel Log page on the survey website
- FAQs – clicking ‘FAQs’ will link to the FAQs page on the survey website

Thank you for your participation!

The purpose of the Regional Travel Survey is to understand the travel patterns and travel needs of residents like you, regardless of how you travel or where you go. Your participation is very important and your responses *will* have a significant impact on future transportation planning decisions throughout the region.

This survey is conducted by RSG © 2017 for the National Capital Region Transportation Planning Board in cooperation with the region's state and local transportation agencies.

Your privacy will be protected. Please click [here](#) to view our privacy policy. If you have questions, please email us at help@RegionalTravelSurvey or call toll-free: 1-855-539-7634.

Here are some tips to help you complete the Regional Travel Survey.

How do I go from question to question?

Want to go forward? Use the “Next” button at the bottom of the screen to advance.

Want to back up? Use the “Previous” button at the bottom of the screen to go back.

Please do not use your web browser’s “Back” button.

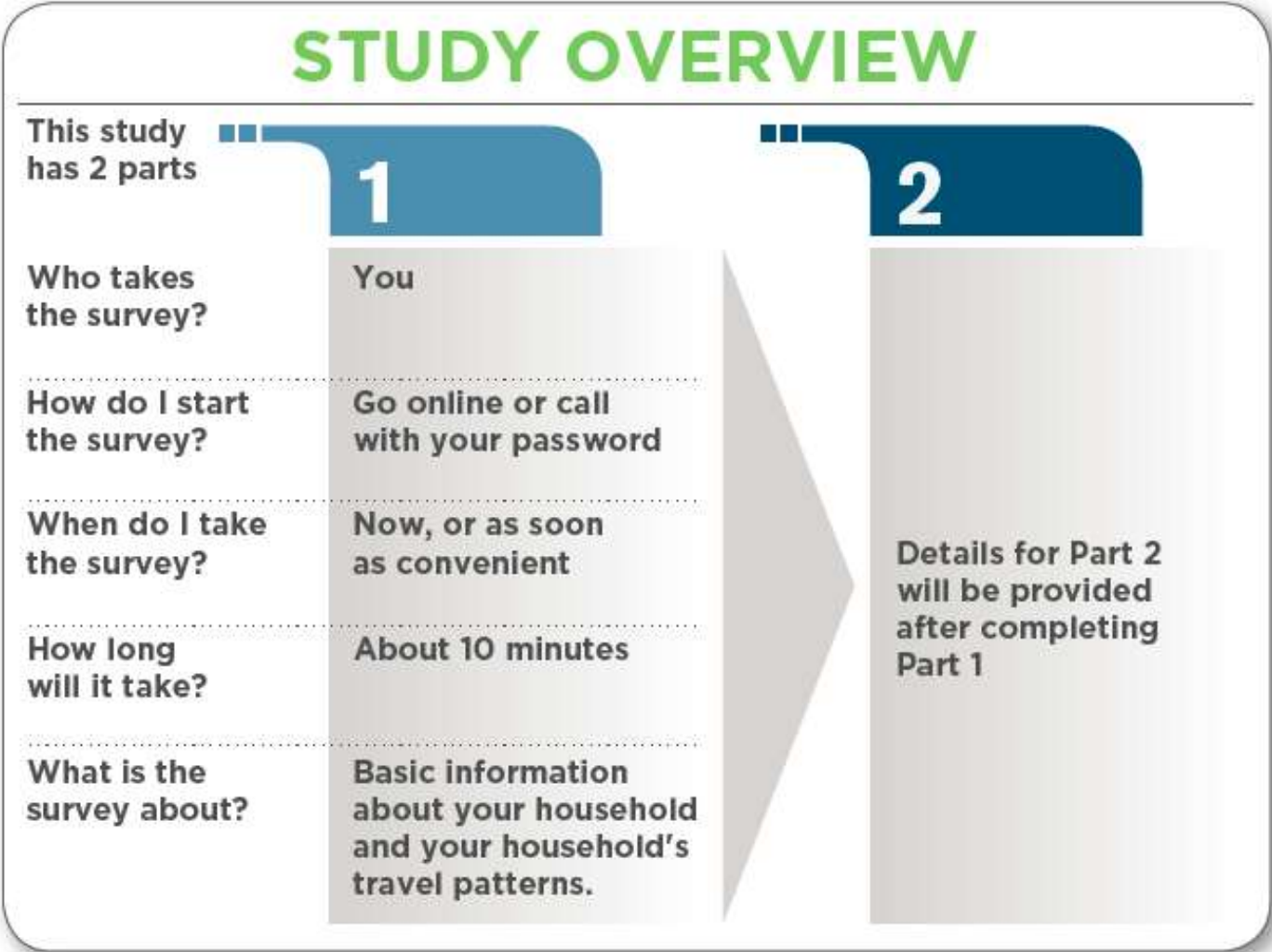
What if I need to stop taking the survey before I finish?

No problem. You can always return later and pick up from where you left off. All of your answers are automatically saved for you.

Can I complete this survey on a mobile device?

We recommend taking the survey on a tablet, laptop, or desktop computer, but the survey will also work on smartphones.

Thank you for beginning Part 1 of the survey today!



[If password file field home_geocode= 0 then show this page]

Please confirm this is your current residence.

Street Address: *<Prepopulate with sample street address>*

City: *<Prepopulate with sample city>*

State: *<Prepopulate with sample state>*

Zip: *<Prepopulate with sample zip>*

- ☐ Yes
- ☐ No *[If respondent replies NO then send to geocoder (next slide)]*

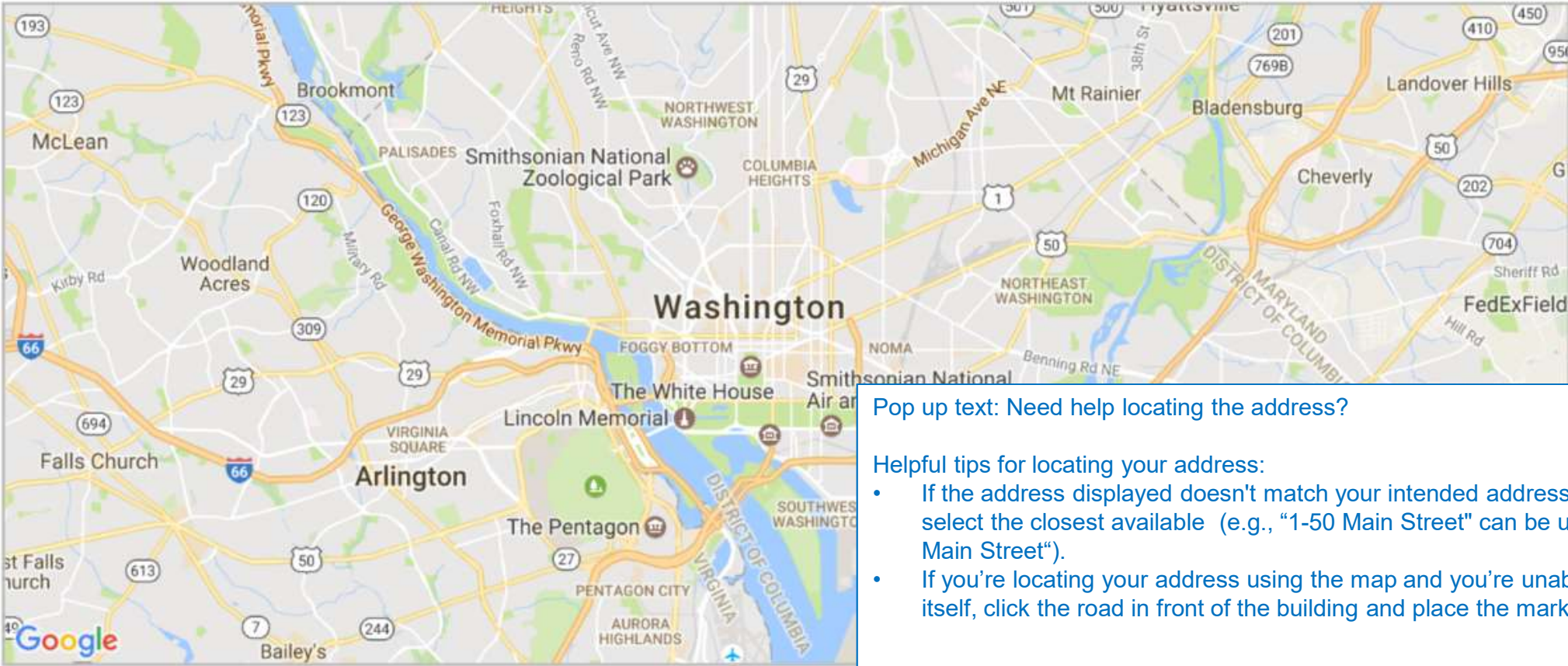
[If password file field home_geocode= 1 OR if respondent replies NO to does not live at sample address THEN show this page]
Page displayed in pace of home_confirm for households with PO boxes as their mailing address as well as reviewer/test passwords that do not have geocoded addresses. And shown to those who replied NO for home_confirm.

Please indicate where your current residence is located.

This information is *only* used to make sure a representative sample participates in the survey. Please click [here](#) to view our privacy policy.

You can also double-click to zoom in on the map and place a marker to select a location. [Need help locating the correct address?](#)

Enter a location or address



Pop up text: Need help locating the address?

Helpful tips for locating your address:

- If the address displayed doesn't match your intended address exactly, you can select the closest available (e.g., "1-50 Main Street" can be used instead of "32 Main Street").
- If you're locating your address using the map and you're unable to click the building itself, click the road in front of the building and place the marker there instead.

How many total people (including yourself) currently live in your household?

Your household includes yourself, all other adults, all children, and all roommates who normally reside with you. Please do not include people who are currently living away from home (e.g., living at college, active duty and stationed elsewhere).

- ☐ 1 (I am the only person)
- ☐ 2 people
- ☐ 3 people
- ☐ 4 people
- ☐ 5 people
- ☐ 6 people
- ☐ 7 people
- ☐ 8 or more people

Please tell us about yourself.

Initials or nickname

Text, unique for each person

Age

[if prefers not to answer exact age] Age range

Please tell us about the other people in your household.

Household member **<x>** of **<n>** member(s)

Initials or nickname

Text, unique for each person

Relationship to you

Other relationship to you

Please specify...

Age

[if prefers not to answer exact age] Age range

Household member **<x>** of **<n>** member(s)

Initials or nickname

Text, unique for each person

Relationship to you

Other relationship to you

Please specify...

Age

[if prefers not to answer exact age] Age range

Member details: response options

[relationship]

- 1 Husband/Wife/Partner
- 2 Son/Daughter/In-law
- 3 Mother/Father/In-law
- 4 Brother/Sister/In-law
- 5 Grandchild
- 6 Other relative
- 7 Roommate/Friend
- 8 Household help
- 997 Other

[age_detailed]

- 0 Less than 1
- 1 1
- 2 2
- ...
- 99 99 or older
- 999 Prefer not to answer

[age_followup] *if no answer to 1-year increments*

Only show to hh members 2 through N:

- 1 Under 5 years old
- 2 5–11 years
- 3 12–13 years
- 4 14–15 years
- 5 16–17 years

Show to all (including hh member 1):

- 6 18–24 years
- 7 25–34 years
- 8 35–44 years
- 9 45–54 years
- 10 55–64 years
- 11 65–74 years
- 12 75–84 years
- 13 85 years or older

How many motor vehicles (in working order) are there in your [household](#)?

Please include all motor vehicles that your household regularly uses, such as cars, trucks, SUVs, vans, RVs, and motorcycles (whether owned, leased, or a company vehicle).

Please do NOT include uninspected/unregistered motor vehicles or vehicles, such as ATVs, snowmobiles, trailers, golf carts, watercraft, or [carshare](#) vehicles (e.g., car2go, Zipcar, etc.).

- ☐ 0 (no vehicles)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8 or more vehicles

“household?” pop-up text:

Your household includes yourself, all other adults, all children, and all roommates who normally reside with you. Please do not include people who are currently living away from home (e.g., living at college, active duty and stationed elsewhere).

“carshare” pop-up text:

A carshare program is a membership based car rental service for occasional and short term vehicle use, usually by the hour.

*This page is shown for each vehicle in the household.
This page is only shown if the household has 1 or more vehicle(s).*

Please tell us about the vehicles in your household.

Viewing *<x>* of *<n>* vehicle(s)

Year

Body Type

[if selected other body type] Other Body Type

Make

[if selected other make] Other Make

Model

Fuel Type

[if selected other fuel type] Other Fuel Type

Does this vehicle have a toll transponder (e.g., E-ZPass®)?

Vehicle details: response options

[vehicle_year]

*Lists every year between 1980-2017, in reverse chronology.
“1980 or older” is listed as the last/bottom choice.*

[vehicle_body]

- 1 Car (or station wagon)
- 2 Van (any type)
- 3 SUV
- 4 Pickup Truck
- 5 Other type of truck
- 6 RV
- 7 Motorcycle
- 997 Other

[vehicle_make]

Dynamic list of vehicle makes (e.g., Honda, Ford), including “Other” Dynamically populated based on selected vehicle year

[vehicle_model]

*Dynamic list of vehicle models
Dynamically populated based on selected vehicle make*

[vehicle_fuel]

- 1 Gas
- 2 Diesel
- 3 Plug-in Hybrid
- 4 Hybrid
- 5 Electric
- 6 Flex Fuel
- 997 Other

[vehicle_transponder]

- 1 Yes, E-ZPass
- 2 Yes, E-ZPass Flex
- 3 Yes, other transponder (not E-ZPass)
- 4 No

How many bicycles are there in your household primarily used by household members 16 years of age or OLDER?

Please include all types of bicycles (e.g., adult, road, mountain, commuter, etc.). Do not include child bicycles, bikeshare, non-working, or rental bicycles.

- ☐ 0 (no bicycles)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 or more bicycles

“bikeshare” pop-up text:

“A bikeshare program is a membership based bicycle rental service for occasional and short term use, usually by the hour.”

[if HH has member(s) 15 and under] How many bicycles are there in your household primarily used by household members 15 years of age or YOUNGER?

Please include all types of bicycles (e.g., child, road, mountain, commuter, etc.). Do not include toy bicycles, bikeshare, non-working, or rental bicycles.

- ☐ 0 (no bicycles)
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5 or more bicycles

“household” pop-up text:

Your household includes yourself, all other adults, all children, and all roommates who normally reside with you. Please do not include people who are currently living away from home (e.g., living at college, active duty and stationed elsewhere).

Page cycles through all hh members to gather member details.

Please tell us more about <yourself/Name>.

[if age 14+] Have a valid driver's license?

[if age 5+] Have a disability or illness that affects ability to travel?

[remove validation, do not require a response] Gender

[if age 16+] Currently employed?

[If employed = No] Which best describes current employment status?

[if employed <> No] Number of jobs

[if 16+] Currently a volunteer?

[if 18+ and unemployment_status<> student] Currently a student?

[if <18 or (age 18+ and student)] Primary type of school

[age 16+] Has a smartphone?

Select... ▼

- Race/ethnicity
- ☐ 1 African American or Black

☐ 2 American Indian or Alaska Native

☐ 3 Asian

☐ 4 Hispanic or Latino

☐ 5 Native Hawaiian or Pacific Islander

☐ 6 White (Not of Hispanic or Latino origin)

☐ 999 Prefer not to answer

☐ 997 Other, please specify _____
- Write-in required when "Other" is selected.

Member details: response options

[license]

- 1 Yes
- 2 No

[disability]

- 1 Yes
- 2 No
- 999 Prefer not to answer

[gender]

- 1 Female
- 2 Male

[employment_status]

- 1 No
- 2 Yes, employed full or part time
- 3 Yes, unpaid family worker or intern

[unemployment_status]

- 1 Retired
- 2 Disabled or on disability status
- 3 Homemaker
- 4 Student
- 5 Not currently employed, but seeking employment
- 6 Leave of absence or not currently seeking employment

[jobs_count]

- 1 1 job
- 2 2 jobs
- 3 3 jobs
- 4 4 jobs
- 5 5 or more jobs

[volunteer_status]

- 1 No, do not currently volunteer
- 2 Yes, currently volunteer

[student_status]

- 1 No, not a student
- 2 Yes, full-time or part-time student

[School_type]

See following slide

[smartphone]

- 1 Yes
- 2 No

School type: response options

Person age	Student status	School type
Under 5 years old	Question not shown	Show Question: Answer choices are: 1 Daycare 2 Nanny/babysitter 3 Nursery School, Preschool 4 Kindergarten - Grade 8 (public or private) 5 Grade 9-12 (public or private) 6 Home school (K-12) 7 Technical/Vocational school 8 2 year college 9 4 year college or university 10 Graduate/Professional School 11 None 997 Other
5-11 years	Question not shown	Show Question: Answer choices are: 1 Daycare 2 Nanny/babysitter 3 Nursery School, Preschool 4 Kindergarten - Grade 8 (public or private) 5 Grade 9-12 (public or private) 6 Home school (K-12) 7 Technical/Vocational school 8 2 year college 9 4 year college or university 10 Graduate/Professional School 11 None 997 Other
12-15 years	Question not shown	Show Question: Answer choices are: 1 Daycare 2 Nanny/babysitter 3 Nursery School, Preschool 4 Kindergarten - Grade 8 (public or private) 5 Grade 9-12 (public or private) 6 Home school (K-12) 7 Technical/Vocational school 8 2 year college 9 4 year college or university 10 Graduate/Professional School 11 None 997 Other

Person age	Student status	School type
16-17 years	Question not shown	1 Daycare 2 Nanny/babysitter 3 Nursery School, Preschool 4 Kindergarten - Grade 8 (public or private) 5 Grade 9-12 (public or private) 6 Home school (K-12) 7 Technical/Vocational school 8 2 year college 9 4 year college or university 10 Graduate/Professional School 11 None 997 Other
18-24 years	Show Question	Show Question <i>IF answer is YES am a full or part-time student:</i> Answer choices are: 1 Daycare 2 Nanny/babysitter 3 Nursery School, Preschool 4 Kindergarten - Grade 8 (public or private) 5 Grade 9-12 (public or private) 6 Home school (K-12) 7 Technical/Vocational school 8 2 year college 9 4 year college or university 10 Graduate/Professional School 11 None 997 Other
25+	Show Question	Show Question <i>IF answer is YES am a full or part-time student:</i> Answer choices are: 1 Daycare 2 Nanny/babysitter 3 Nursery School, Preschool 4 Kindergarten - Grade 8 (public or private) 5 Grade 9-12 (public or private) 6 Home school (K-12) 7 Technical/Vocational school 8 2 year college 9 4 year college or university 10 Graduate/Professional School 11 None 997 Other

Page cycles through all hh members who are Age = 16+.

How often <do you/does Name> use each travel option for WEEKDAY (Monday-Friday) travel?

[If 16+ AND employed <> No] How often <do you/does Name> carpool or vanpool to work on weekdays?

[if 16+] How often <do you/does Name> use a HOV lane for weekday peak period travel?

[if 16+] How often <do you/does Name> use a HOT lane, toll road, or toll bridge for weekday travel?

[If age 18+] How often <do you/does Name> use a carshare program (e.g., Car2go, Zipcar) for weekday travel?

[if age 16+] How often <do you/does Name> use a ride-hailing service (e.g., Uber, Lyft) for weekday travel?

[if age 16+] How often <do you/does Name> use a bicycle (including bikeshare) for weekday travel?

[if age 16+] How often do you use public transportation (bus, subway, light rail, streetcar, commuter rail) for weekday travel?

“HOT” Pop-up text:
A high-occupancy toll (HOT) lane is a restricted traffic lane reserved for the exclusive use of vehicles that have paid a toll (e.g., I-95/495 Express Lanes, I-95 Express Toll Lanes).

“HOV” Pop-up text:
“A high-occupancy vehicle (HOV) lane is a restricted traffic lane reserved for the exclusive use of vehicles with a driver and one or more passengers (e.g., I-395 HOV, I-66 HOV, VA-267 HOV, I-270 HOV; US-50 HOV). Do not include HOT lanes (I-95/495 Express Lanes, I-95 Express Toll Lanes) or HOV lanes on surface streets (Alexandria, VA).”

“peak period” Pop-up text:
Peak Period Travel occurs during times when most people commute to and from work, typically between 5:30 AM – 9:30 AM and 3:00 PM – 7:00 PM on weekdays in the National Capital Region.

“carshare” Pop-up text:
A carshare program is a membership based car rental service for occasional and short term vehicle use, usually by the hour.

“ride-hailing” Pop-up text:
A ride-hailing service arranges one-time individual or shared rides on an on-demand basis using a smartphone app.

“bikeshare” pop-up text:
“A bikeshare program is a membership based bicycle rental service for occasional and short term use, usually by the hour.”

Travel behavior frequencies: response options

[travfreq_pool] travelbehavior_freq_1
[travfreq_hot] travelbehavior_freq_2
[travfreq_hov] travelbehavior_freq_3

Use same response options for all variables listed above.

- 1 Never
- 2 Only on weekends
- 3 3-5 weekdays a week
- 4 1-2 weekdays a week
- 5 A few weekdays per month
- 6 A few weekdays per year

[travfreq_carshare] travelbehavior_freq_4
[travfreq_rideshare] travelbehavior_freq_5
[travfreq_bike] travelbehavior_freq_6
[travfreq_transit] travelbehavior_freq_7

Use same response options for all variables listed above.

- 1 Never
- 2 Only on weekends
- 3 3-5 weekdays a week
- 4 1-2 weekdays a week
- 5 A few weekdays per month
- 6 A few weekdays per year

Travel to/from school impacts many families' transportation decisions.

If member = 1

How often do you travel to school to attend class or other events such as study group on WEEKDAYS (Monday-Friday)?

If member = 2+

How often does <Name> travel to daycare/school/college to attend class or other events such as study group WEEKDAYS (Monday-Friday)?

[if student, and school type not homeschooled, nanny, none]

How often travels to school each week?

Select... ▼

[if travels to school, not online only]

How usually travels to school?

Select... ▼

[if selected "other" school mode]

Other way travels to school:

Please specify...

School details: response options

Numbers in red indicate db values– do not show numbers on screen

[school_freq]

- 1 5 weekdays a week
- 2 4 weekdays a week
- 3 3 weekdays a week
- 4 2 weekdays a week
- 5 1 weekday a week
- 6 Weekends only
- 7 Less than four weekdays per month
- 8 [if age 5+] Never, only takes online classes

[school_mode]

- 8 School bus [show if person is under age 25]
- 1 Walk (or jog, wheelchair)
- 2 Bicycle
- 6 Motorcycle/moped/scooter
- 3 Drive alone in car, truck or van [show if person has a drivers license]
- 4 Drive/carpool with ONLY family/household member(s)
- 5 Carpool with at least one person NOT in household
- 7 Vanpool
- 9 Local bus
- 10 Subway (Metrorail, Baltimore Metro)
- 11 Commuter rail (e.g., MARC, VRE)
- 12 Streetcar/light rail
- 13 Shuttle bus
- 14 MetroAccess or Dial-A-Ride
- 15 Taxi or other rideshare service (e.g., Lyft, Uber)
- 997 Other

Use same mode list for school/work commute (same values/options, but may be displayed in a different order or different display logic)

Mode list for travel diary is slightly different because more details are collected (e.g., vehicle used, driver/passenger, etc.)

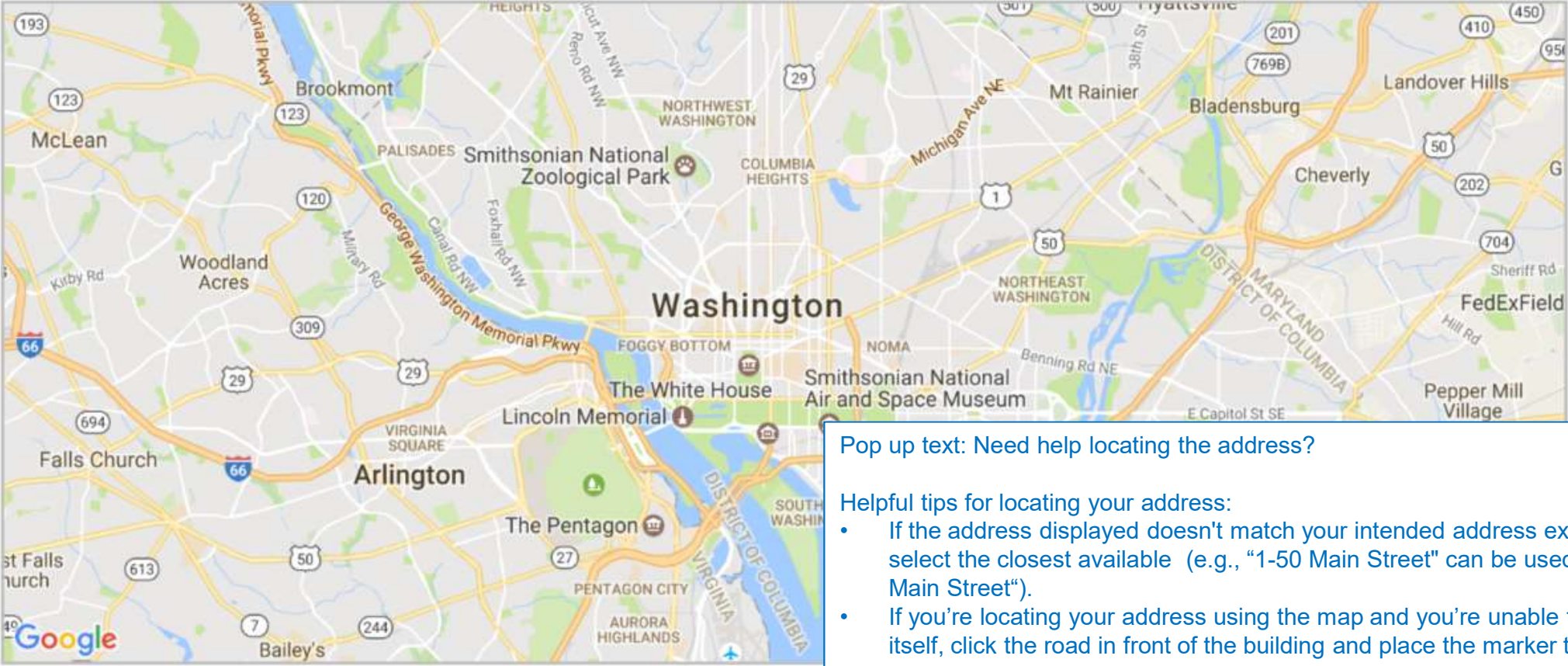
Only show this page/question to HH members who travel to school.
People who only take online classes, are home-schooled, or are not students do not see this question.

Please indicate where **<name>**'s usual daycare/school/college is located.

If attends school/classes/daycare in more than one place, please locate the primary school location (where goes most often).

You can also double-click to zoom in on the map and place a marker to select a location. [Need help locating the correct address?](#)

Enter a location or address



Pop up text: Need help locating the address?

Helpful tips for locating your address:

- If the address displayed doesn't match your intended address exactly, you can select the closest available (e.g., "1-50 Main Street" can be used instead of "32 Main Street").
- If you're locating your address using the map and you're unable to click the building itself, click the road in front of the building and place the marker there instead.

Page/question only shown if HH member has employment status = full-time/part-time or unpaid family worker or intern
Repeat this page for each job location number classification, up to three (first/second/third).

For many people, going to/from their job is a major part of their travel each week.
Next, we will ask a few questions in order to better understand commuting across the region.

[If jobs_count =1] Please describe <Name's/your> job.
[If jobs_count>1] You reported that <Name/you> currently have <two/three> jobs. Please describe <Name's/your> <FIRST/SECOND/THIRD> job.

Employer's type of organization (e.g., nonprofit, government)?

Select... ▼

Usual work location?

Select... ▼

[workplace type = fixed/varied (not home/driver)]

Usual number of **WEEKDAY** (Monday-Friday) commutes per week?

Select... ▼

[workplace type = fixed/varied (not at home/driver)]

Usual way of commuting to primary workplace?

Select... ▼

[workplace type = fixed/varied (not home/driver)]

Usual number of **WEEKDAY** (Monday-Friday) telecommutes per week?

Select... ▼

[workplace type = fixed/varied (not home/driver)]

Amount of flexibility in arrival time at workplace?

Select... ▼

[work_flex = 1 or 3]

Usual work start time?

Select... ▼

[work_flex = 1 or 3]

Usual work end time?

Select... ▼

"way of commuting" Pop-up text:
If more than one mode of travel is used
for the usual commute to work, please
selected the mode used for most of the
distance.

"telecommutes" Pop-up text:
Telecommute includes teleworking from
home or other location rather than making
a commute trip to work.

Does employer offer any of the following transportation benefits? *Select all that apply.*

Do not ask for jobs where workplace type = at home. Display benefits checklist from next page.

Previous

Next

Regional Travel Survey

Part 1 (recruit)

25

Job details: response options

[workplace]

- 1 Usually the same location (outside home)
- 2 Workplace regularly varies (different offices or jobsites)
- 3 At home (telecommute or self-employed with home office)
- 4 Drives for a living (e.g., bus driver, salesperson)

[commute_freq]

- 1 5 weekdays a week
- 2 4 weekdays a week
- 3 3 weekdays a week
- 4 2 weekdays a week
- 5 1 weekday a week
- 6 Weekends only
- 7 Less than 4 weekdays per month
- 8 Schedule varies week-to-week

[work_flex]

- 1 Must arrive at the same time each day
- 2 Start time varies depending on day or shift
- 3 Some flexibility (e.g., can start up to 30 minutes earlier/later than scheduled)
- 4 Complete flexibility (e.g., can set own schedule)

[work_mode]

- 1 Walk (or jog, wheelchair)
- 2 Bicycle
- 6 Motorcycle/moped/scooter
- 3 Drive alone in car, truck or van *[show if person has a drivers license]*
- 4 Drive/carpool with ONLY family/household member(s)
- 5 Carpool with at least one person NOT in household
- 7 Vanpool
- 9 Local bus
- 10 Subway (Metrorail, Baltimore Metro)
- 11 Commuter rail (e.g., MARC, VRE)
- 12 Streetcar/light rail
- 13 Shuttle bus
- 14 MetroAccess or Dial-A-Ride
- 15 Taxi or other ride-hailing service (e.g., Lyft, Uber)
- 997 Other

Use same mode list for school/work commute (same values/options, but may be displayed in a different order)

Mode list for travel diary is slightly different because more details are collected (e.g., vehicle used, driver/passenger, etc.)

[employer_type]

- 1 Work for private for-profit firm/company
- 2 Work for nonprofit firm/organization
- 3 Work for federal government
- 4 Work for state or local government
- 5 Work for foreign governmental agency or international governmental organization (e.g., World Bank, IMF, etc.)
- 6 Self employed

[telecommute_freq]

- 1 Not eligible to telecommute
- 2 Eligible, but choose not to telecommute
- 3 Less than 4 weekdays per month
- 9 Weekends only
- 4 1 weekday a week
- 5 2 weekdays a week
- 6 3 weekdays a week
- 7 4 weekdays a week
- 8 5 weekdays a week

List of transport benefits

- ☐ Free Parking
- ☐ Subsidized/Pre-Tax Benefit for Parking
- ☐ Subsidized/Pre-Tax Benefit for Transit Use
- ☐ Cash or other incentives for Carpool and Vanpool
- ☐ Cash or other incentives for walking or biking to work
- ☐ Electric vehicle charging station
- ☐ Secure bicycle parking facility
- ☐ None, employer doesn't offer any transportation benefits
- ☐ Don't know

Show this page/question to HH members who commute to a **fixed or varied** workplace. People who work at home or drive for a living skip this question. Repeat sequence for each of HH members jobs up to 3 (if has 4 or 5 jobs only collect details for up to 3).

[If jobs_count =1 and fixed work loc] Please indicate where **<your/name's>** workplace is located.

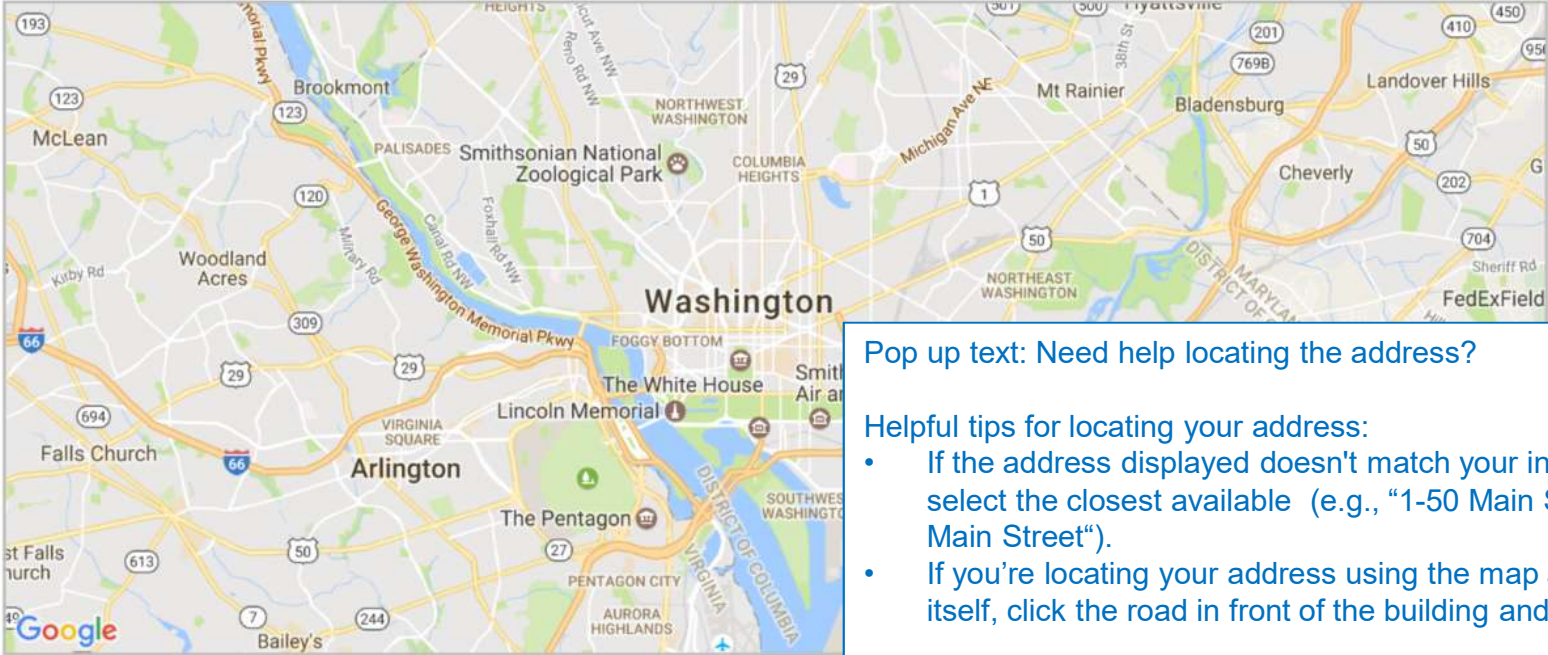
[If jobs_count>1 and fixed work loc] You reported that <Name/you> currently have **<two/three>** jobs. Please indicate where **<your/name's>** **<FIRST/SECOND/THIRD>** workplace is located.

[If jobs_count =1 and varied work loc] Please indicate the location where **<you/name>** last worked.

[If jobs_count>1 and varied work loc] You reported that <Name/you> currently have **<two/three>** jobs. Please indicate the location where **<you/name>** last worked for **<your/name's>** **<FIRST/SECOND/THIRD>** job.

You can also double-click to zoom in on the map and place a marker to select a location. [Need help locating the correct address?](#)

Enter a location or address



Pop up text: Need help locating the address?

Helpful tips for locating your address:

- If the address displayed doesn't match your intended address exactly, you can select the closest available (e.g., "1-50 Main Street" can be used instead of "32 Main Street").
- If you're locating your address using the map and you're unable to click the building itself, click the road in front of the building and place the marker there instead.

For the next few questions, please think about your current residence (the place where you received the invitation for this survey). If you received the survey invitation in a PO Box, please answer for your primary residence closest to the Post Office where you collect your mail.

Do you rent or own your current residence?

- ☐ Own/buying (paying mortgage)
- ☐ Rent
- ☐ Provided by job or military
- ☐ Provided by family, relative, or friend without payment of rent
- ☐ 997 Other
- ☐ 999 Prefer not to answer

What type of place is your current residence?

- ☐ Single-family house detached from any other house
- ☐ Single-family house attached to one or more houses (rowhouse, duplex, or townhouse)
- ☐ Building with 2-9 apartments/condos
- ☐ Building with 10-49 apartments/condos
- ☐ Building with 50 or more apartments/condos
- ☐ Mobile home/trailer
- ☐ Dorm or institutional housing
- ☐ 997 Other

In 2016, what was your [household's](#) total annual income (from all sources) before taxes or other deductions from pay?

This information is only used to ensure our study is representative of all income groups in the region.
Please see our [privacy policy](#) for more information.

- ☐ 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
- ☐ 999 Prefer not to answer

“household’s” pop-up text:

Your household includes yourself, all other adults, all children, and all roommates who normally reside with you in your home. Please do not include people who are currently living away from home (e.g., living at college, active duty and stationed elsewhere).

If prefers not to answer detailed income

Would you be willing to share less detailed information about your [household's](#) 2016 income?

We ask to help understand how closely the people who participate in this survey represent the region's true population. It also helps understand how residents are impacted by different transportation projects, policies, and costs.

Your answers will be kept strictly anonymous and will be grouped with answers from all other participating households. Please see our [privacy policy](#) for more information.

- ☐ Less than \$50,000
- ☐ \$50,000 or more
- ☒ **999** Prefer not to answer

"household?" pop-up text:

Your household includes yourself, all other adults, all children, and all roommates who normally reside with you in your home. Please do not include people who are currently living away from home (e.g., living at college, active duty and stationed elsewhere).

Categorization of Households

Grouping rules:

Segment 1: All HH members are not given choice how to participate. All HH members will participate using the online diary.

Segment 99: Reviewer segment treated like Segment 2, but never shown incentive text/questions. Reviewers are not eligible for incentives, but contact info should be collected (either email or phone) so that reviewers can receive reminders just like regular participants.

Don't show any incentive info to volunteers (segnum 99).

[do not show to segnum 99] **After your household completes Part 2 of the Survey, we will send a \$20 gift card as thanks.**

[do not ask segnum 99] **What type of gift card would your household like to receive after participating in Part 2 of the survey?**

- Amazon gift card (delivered by email)
- Walmart gift card (delivered by email)
- Walmart gift card (mailed, I understand this may take longer to deliver)
- Donate participation gift to the American Red Cross
- None – prefer not to receive a gift card or make a donation

Email asked of all. Email is required if chose e-gift card, show relevant incentive text only to those who select e-gift.

Email is optional if chose mailed or no gift card or if a volunteer respondent/reviewer (segnum 99).

Please provide an email address where we can <send your gift card and> send you reminders about the survey.

You will only be contacted for this survey and your information will never be shared or linked to your responses. Please see our [privacy policy](#) for more information.

Email text box entry: 200 characters; validate format

Show to all; require one phone number if no email was provided at household level or for hh member 1 if rMove participant. Custom validation message if email is skipped and phone is skipped, telling people to provide at least one.

We offer user support and assistance during Part 2 of the survey.

Please provide one phone number that, if needed, we could use to reach you during Part 2 of the survey.

As part of our [privacy policy](#), you will only be contacted for this survey and your information will NEVER be shared.

Landline:

Cell:

Only show if provided both an email address and a phone number.

How would you prefer to be contacted for the remainder of this survey?

We will provide more information about Part 2 of the survey. You will be contacted for this survey only and your personal information will NEVER be shared. Please see our [privacy policy](#) for more information.

Please select all that apply.

- ☐ By email
- ☐ By phone

Click “Finish” to complete Part 1 of the Regional Travel Survey!

Your participation is important and your responses *will* have a significant impact on future transportation planning decisions throughout the region.

To complete the survey, please click “Finish” for details on Part 2.

[show if HH did not waive the incentive]

After your entire household completes Part 2, we will send your \$20 **<Amazon gift card, Walmart gift card, American Red Cross donation>** as thanks for your participation.

Travel Date Assignment

Travel dates will be assigned in real-time based on when respondents complete this recruit survey.

The goal of travel date assignment is to quickly assign dates so people don't drop out before their date, but far enough in the future so that they can act on our instructions. Assigned travel dates are written out in the database.

Length of Travel Period:

- Will have a travel period of 1 day (one 24-hour period)

Assignment of Travel Period:

- All instructions sent via email/phone (based on preference)
 - Day of week is preassigned by password for this survey - other options if not preassigning day of week could include random or sequential assignment so we have an approximately even distribution.
 - If a participant's assigned day of week (Mon-Fri) is the day of or the day after their Part 1 complete date then it is the Monday, Tuesday, Wednesday, Thursday, Friday of the following week.
 - Otherwise, it will be the following Monday, Tuesday, Wednesday, Thursday, Friday.

Next steps in your participation:

As a reminder, we will contact you by email or phone before your travel period begins.

Each adult will need to record (or remember) the trips they made on **traveldate**.

- Each adult should record (or remember) the trips they make on that day.
- In addition, adults will need to record (or remember) the trips their children take that day.
- Feel free to use this [Travel Log \(PDF\)](#) to keep track of your trip details.

Report your trips using this website or by telephone.

- Starting on **<traveldate + 1>**, each adult in your household should return to this website to report their trips.
- Additionally, you may also call 1-855-539-7634 to report your trips over the telephone.
- Please participate within one week after your travel date.

Receive your gift card! *[show if not all persons waived the incentive]*

- After your household completes these surveys, you will receive your \$20 gift card as thanks for your participation.

Household Members	Survey Status
Adult	Completed
Teen	In progress
Child	Let's get started!
Adult	Complete Part 2 after <travel day>

LOGIC:

1. ALL HH members are listed in the table.
2. Surveys become available at midnight AFTER the travel date is over (e.g., if travel date = January 1st then survey is available at 12:01AM on January 2nd).
3. Surveys expire ("Closed") 9 full days AFTER travel date. TD counts as 1 of those days (e.g., if travel date = January 1st then survey expires at 11:59PM on January 9th).

[hide until TD+1]
Your household has
<days until expiration> days
left to complete Part 2

Appendix D: Final Survey Questionnaire
Part 2: Travel Diary Questionnaire

Notes for reviewers

This questionnaire lays out the text that survey participants will see, including survey information, instructions, questions, and answer choices.

A few tips and notes to keep in mind while reviewing this document:

- **Each slide represents one page in the survey.** Typically there is one question per page, though in some cases a few shorter questions may be asked of respondents on a single page.
- **Slides with a gray background (such as this one) are not shown to survey respondents.** These gray slides include notes, instructions for programming the survey, or longer lists of answer choices.
- In the comments section below each slide, each page name is shown between [] square brackets (e.g., [intro]). Reviewers should use these page names when providing feedback on the survey.
- **Text between < > angle brackets indicates information displayed dynamically** for each respondent (e.g., a household's travel date or the nickname of the person answering a survey)
- Text written in **Red** indicates notes for programming the survey such as survey logic (e.g., who should see or skip certain questions). These notes will not be shown to respondents. Dynamic text in **red** will be displayed as black in the survey.
- Other colored text indicates items that are highlighted for respondents – these items will be displayed to respondents in these colors
 - Text written in **orange** or **green** indicates words that are highlighted onscreen (in that color) to emphasize different questions or instructions. In the survey instrument **orange** text will be displayed as **red**. For clarity between programming notes and colored text in the powerpoint we have kept the **orange** font color. **Green** text will be shown as **green** both in the powerpoint and survey instrument.
 - Underlined text written in **blue** indicates words or phrases that are hyperlinks (pop-up descriptions, survey information pages, contact links, etc.)

Please contact Michelle Lee (Michelle.Lee@rsginc.com) with any questions or comments about this survey.

Footer

(content shown at the bottom of every page in the survey)

Your household has <days until expiration> days left to complete Part 2

[Privacy](#) [Contact us](#) [Travel Log](#) [FAQs](#)

- Privacy – clicking ‘Privacy’ will open the Privacy page on the survey website in a new tab.
- Contact us – clicking ‘Contact us’ will open an email to the help address with subject line “User:<password>”
- Travel Log – clicking ‘Travel Log’ will open the Travel Log page on the survey website in a new tab.
- FAQs – clicking ‘FAQs’ will link to the FAQs page on the survey website

*If HHsize >= 2: Show to everyone who is age 18 or older
(Assume proxy=3 for children, assume proxy=1 where hhsiz=1)*

To better understand how households are completing the survey, we would like to know if someone other than **<NAME>** is filling out this portion of the survey.

Are you **<NAME> or are you filling out this survey on **<NAME's>** behalf?**

- ☐ I am **<Name>** and I am answering this survey
- ☐ I am answering this survey for **<Name>** and **<Name>** IS here with me to provide answers
- ☐ I am answering this survey for **<Name>** and **<Name>** is NOT here with me to provide answers

The travel day **BEGAN** at 3 AM on **<traveldate>** and **ENDED** at 3 AM on **<traveldate + 1>**.

Where **<was Name/were you>** at 3 AM on **<traveldate>** (when the travel day **BEGAN**)?

- Home
- *[if jobs_count= 1 and reported a fixed workplace]* Work
- *[if jobs_count> 1 and reported a fixed workplace for job 1]* Workplace located at **<First Workplace Street Address>**
- *[if jobs_count> 1 and reported a fixed workplace for job 2]* Workplace located at **<Second Workplace Street Address>**
- *[if jobs_count> 1 and reported a fixed workplace for job 3]* Workplace located at **<Third Workplace Street Address>**
- *[Show if attends school]* School
- Another place, please specify:
- If traveling between places (e.g., in a car, on a bus/plane) **where did this trip END**, please specify:

Where **<was Name/were you>** at 3 AM on **<traveldate + 1>** (when the travel day **ENDED**)?

- Home
- *[if jobs_count= 1 and reported a fixed workplace]* Work
- *[if jobs_count> 1 and reported a fixed workplace for job 1]* Workplace located at **<First Workplace Street Address>**
- *[if jobs_count> 1 and reported a fixed workplace for job 2]* Workplace located at **<Second Workplace Street Address>**
- *[if jobs_count> 1 and reported a fixed workplace for job 3]* Workplace located at **<Third Workplace Street Address>**
- *[Show if attends school]* School
- Another place, please specify:
- If traveling between places (e.g., in a car, on a bus/plane) **where did this trip END**, please specify:

This question is asked if the respondent started and ended their assigned travel date at the same location (e.g. home) and no other HH members have reported them on a trip previously. This is to confirm they traveled.

<Name's/Your> day **began at <startloc>** and **ended at <endloc>**.

Did **<Name/you>** make any trips on **<traveldate>**, even if it was just a short trip such as dropping your child off, getting gas, or picking someone up?

- ☐ Yes
- ☐ No

What is a trip?

A trip is anytime you travel from one place and stop at a new place.

What are some example trips?

- Drive to work
- Drop your child off at day care
- Ride the subway to a meeting
- Take a taxi to the airport
- Ride the bus to a shopping center
- Bike to school
- Carpool to an event

Only show this screen if the respondent started and ended their assigned travel date in different places or if copied 1+ trips from previous hh member (b/c we know they traveled over the course of the day)

Thank you. Next, we will ask you to provide details about the trips <Name/you> made on <traveldate>.

Please review the definition of a “trip” below, then click “Next” to continue.

What is a trip?

A trip is anytime you travel from one place and stop at a new place.

What are some example trips?

- Drive to work
- Drop your child off at day care
- Ride the subway to a meeting
- Take a taxi to the airport
- Ride the bus to a shopping center
- Bike to school
- Carpool to an event

If the respondent said they made NO trips on travel day



What is the primary reason **<Name/you> did not make any trips on **<traveldate>**?**

- ☐ **2** *[show if employed]* Not scheduled to work/took day off
- ☐ **3** *[show if employed]* Worked at home for pay (e.g., telework)
- ☐ **4** Worked around home (not for pay)
- ☐ **5** Children were on school vacation/break
- ☐ **9** Children were home-schooled
- ☐ **6** No household vehicle available
- ☐ **7** Was sick or caring for another person
- ☐ **8** Was waiting for visitor/delivery (e.g., cable installation)
- ☐ **10** Home-bound elderly or disabled
- ☐ **997** Other reason, please specify: _____

Prepopulate text boxes and geocoder with previously typed locations and locations geocoded in recruit survey: Home, Primary Workplace, Second Workplace, Third Workplace, School – List/prepopulate ALL locations geocoded in recruit.


Please list, in order, all the places **<Name/you>** went between 3:00 AM on **<traveldate>** and 3:00 AM on **<traveldate +1>**.



Please provide a unique name or short description for each place visited. When all places are listed, click “Next” to continue.

Click and drag a place to re-order the list. Click the  icon next to a place to add a new one below. Click the  icon to remove a place.

<Name/You> began the day at:

Then went to:

Then went to: 

Then went to:  

<Name/You> ended the day at:

<Name>’s frequent destinations:

Type **HOME** for your home
[if geocoded 1st job] Type **WORK** for your workplace at **<Job 1 Street Address>**
[if geocoded 2nd job] Type **WORK2** for your workplace at **<Job 2 Street Address>**
[if geocoded 3rd job] Type **WORK3** for your workplace at **<Job 3 Street Address>**
[if geocoded school] Type **SCHOOL** for your school

Example Travel Day	
Began day at:	Home
Then went to:	Children’s school
Then went to:	Convenience store
Then went to:	Work
Then went to:	Lunch
Then went to:	Work
Then went to:	Off-site meeting
Then went to:	Work
Then went to:	Children’s school
Then went to:	Drug store
Ended day at:	Home

[list all locations previously geocoded in Part 1 of the survey for this household member maximum of 5 locations (home, work 1, work 2, work 3, school)]

Listed to the right are all the places <Name/you> reported going on <traveldate>.

Are there any trips to add for <Name's/your> travel on <traveldate> that haven't already been reported?

Please select all that apply.

- ☐ Yes, made one or more short trips in the middle of other activities (e.g., a quick trip for lunch)
- ☐ Yes, stopped briefly on way to somewhere else (e.g., for gas, at an ATM, at a drive-thru restaurant)
- ☐ Yes, dropped someone off on way to somewhere else (e.g., spouse at a park and ride lot, child at a friend's house)
- ☐ Yes, picked someone up at a carpool lot or other location
- ☐ Yes, walked a child to the school bus stop
- ☐ Yes, forgot to include another type of trip
- ☐ No, listed all of <Name's/my> trips on <traveldate>

<Name's/Your> Travel Day	
Trip #1	<loc_start> to <place 1>
Trip #2	<place 1> to <place 2>
Trip #3	<place 2> to <place 3>
Trip #4	<place 3> to <place 4>
Trip #5	<place 4> to <place 5>

Location reminders:
WORK is located at <Job 1 street address>
WORK2 is located at <Job 2 street address>
WORK3 is located at <Job 3 street address>

It is important to share all trips, including short stops. This will help us better understand transportation needs in the region. Some types of trips (e.g., walks, bike rides, or short stops on the way to somewhere else) are easy to forget!

If the respondent selected any “Yes” answers, branch back to locs; the 2nd time they see this page, the “No” box will automatically be checked but their original answers will be saved in the DB



If respondent added trips on previous page, they return to the roster to add them.

Please list, in order, all the places <Name/you> went between 3AM on <traveldate> and 3AM on <traveldate +1>.

Please provide a unique name or short description for each place visited. When all places are listed, click “Next” to continue.


Add this sentence if person loops back to roster after locs_confirm:

Please insert any places you want to add. Remember you can drag the places to reorder the list.

Click and drag a place to re-order the list. Click the  icon next to a place to add a new one below. Click the  icon to remove a place.

<Name/You> began the day at:

Then went to:

Then went to: 

Then went to:  

<Name/You> ended the day at:

<Name>’s frequent destinations:

Type **HOME** for your home
[if geocoded 1st job] Type **WORK** for your workplace at <Job 1 Street Address>
[if geocoded 2nd job] Type **WORK2** for your workplace at <Job 2 Street Address>
[if geocoded 3rd job] Type **WORK3** for your workplace at <Job 3 Street Address>
[if geocoded school] Type **SCHOOL** for your school

Example Travel Day

Began day at:	Home
Then went to:	Children’s school
Then went to:	Convenience store
Then went to:	Work
Then went to:	Lunch
Then went to:	Work
Then went to:	Off-site meeting
Then went to:	Work
Then went to:	Children’s school
Then went to:	Drug store
Ended day at:	Home

[list all locations previously geocoded in Part 1 of the survey for this household member maximum of 5 locations (home, work 1, work 2, work 3, school)]

Locate by Address

- Example: 500 Main St
- Example: Market St
- Example: Corner of Main St and

We'll now ask you to locate each place you went. Click a place below to begin locating it on the map. Once you've located a place, its button will turn green.

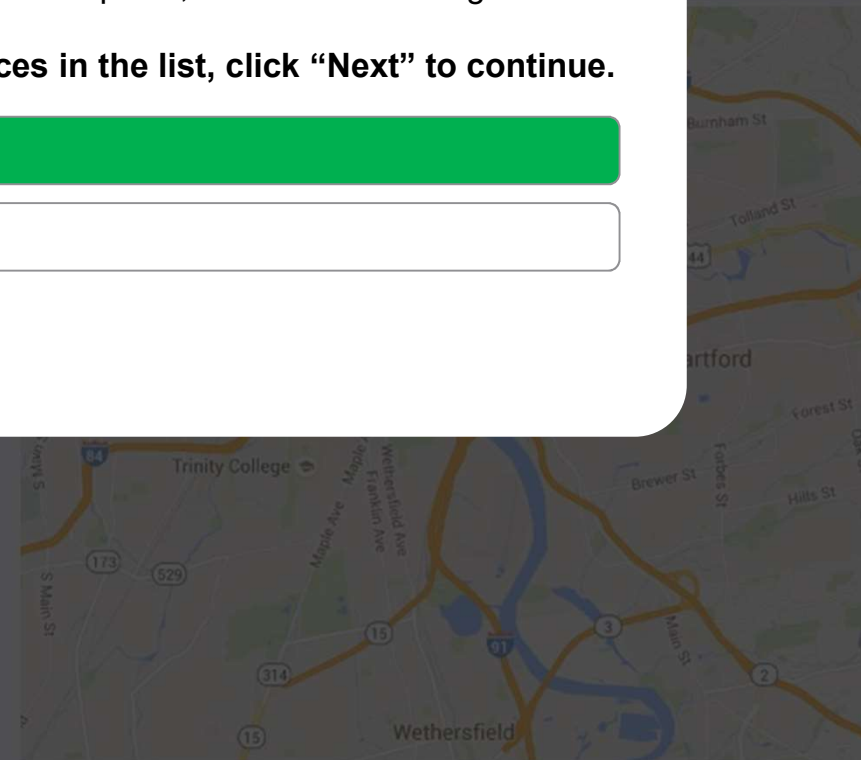
Once you have located all of the places in the list, click "Next" to continue.

<loc_start>: <Street address>

Place 2:

< Previous

Next >



Locations are cycled through in sequential order from the roster; places visited more than once (with the same name) only have to be geocoded once. Locations that were geocoded in the recruit survey (home, work, school) will be shown with a prepopulated location that respondents can confirm or change.

Please locate: <place name>

Locate by address

Locate on the map

[if locate by address]

To search by address or business name:

1. Enter a street address, nearest intersection, or business name in the box below

2. Click on the **blue search button** to the right of the box

3. Click on the correct address from the list of search results that appear

4. Once the location is identified, click the Confirm button on the map.

• Example: Carnegie Library, Washington, DC

• Example: 1900 Clarendon Blvd, Arlington, VA 22201

• Example: Ridge Rd SE & B St SE, Washington DC

[if locate by map]

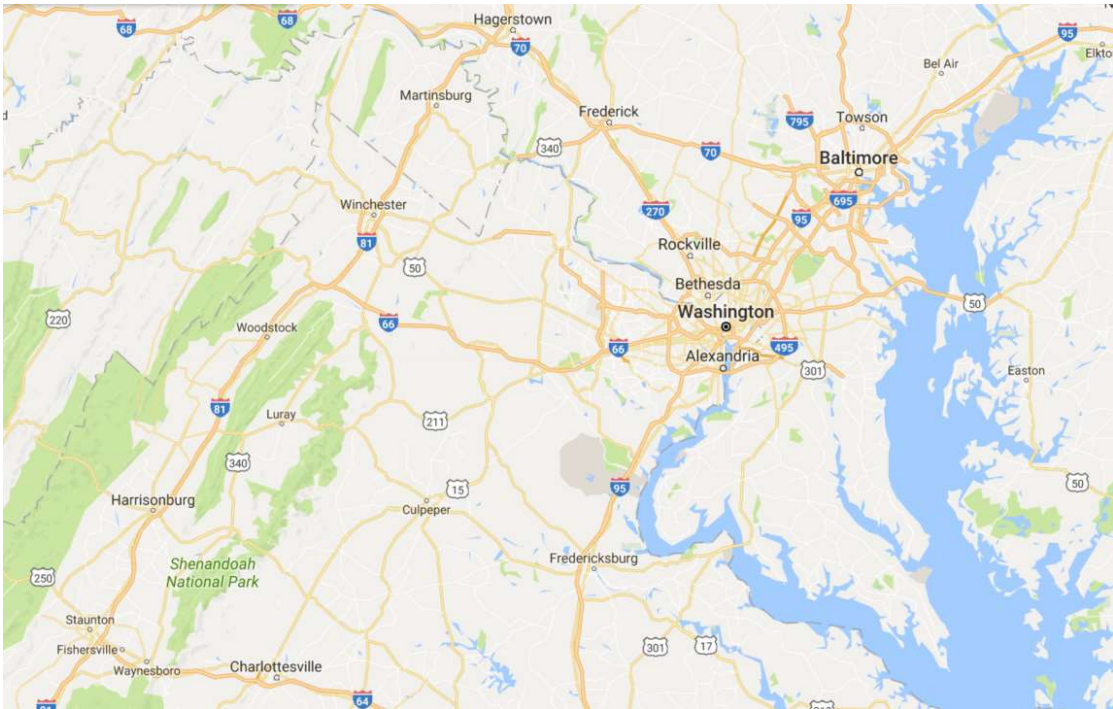
Map instructions

1. Click on the map to zoom in.

2. When zoomed close enough, clicking the map will place a ‘marker.’

3. Continue clicking until you have located the correct place.

4. Once the location is identified, click the Confirm button on the map.



Text for dialog box when the Google API geocoder doesn't locate the user-specified address and geocodes to a jurisdictional centroid "I'm sorry, we did not find that specific location. Please try again entering additional address information or a nearby street intersection."

Locate by Address

- Example: 500 Main St
- Example: Market St
- Example: Connecticut Ave

We'll now ask you to locate each place you went. Click a place below to begin locating it on the map. Once you've located a place, its button will turn green.

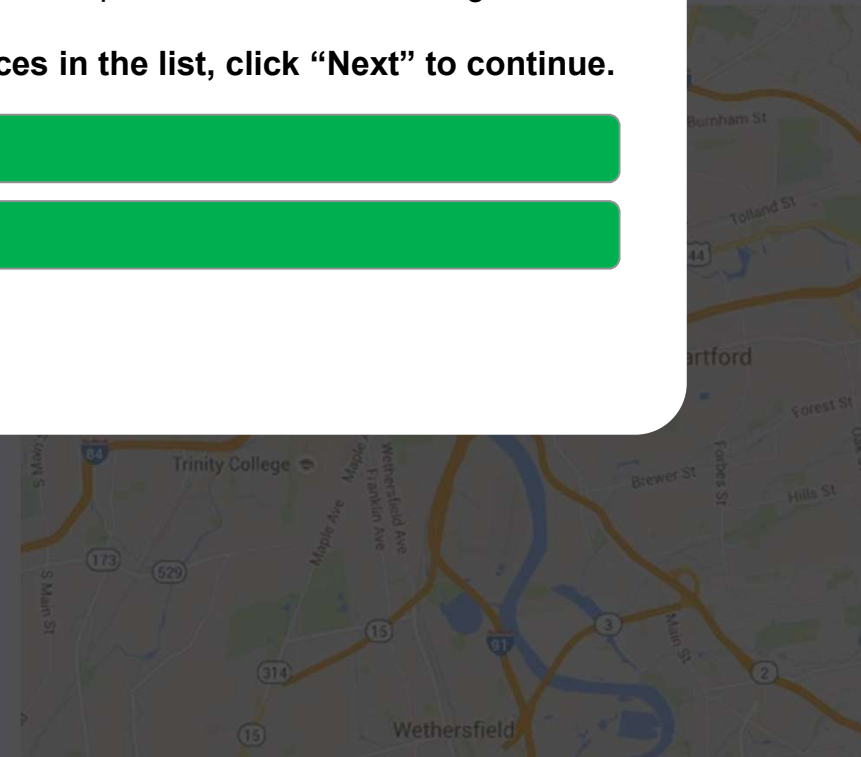
Once you have located all of the places in the list, click "Next" to continue.

Place 1: address details displayed

Place 2: address details displayed

< Previous

Next >

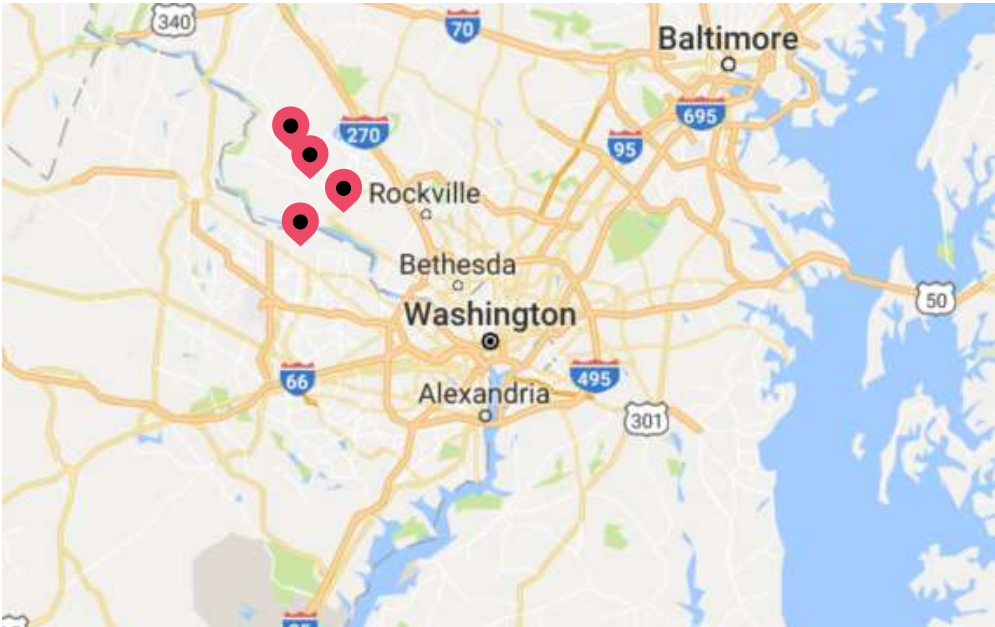


The list below should include all the trips **<Name/you>** made on **<traveldate>**.

If you need to add or remove any trips, please click "Previous" to go back and edit your locations.

If all of **<Name's/your>** trips from **<day of week><traveldate>** are shown below, please click "Next" to continue.

Trip #	Start	End	Approx. Distance
1	<3am start loc>	<first location>	<miles, round to 1 decimal place>
2	<first location>	<second location>	
3	<second location>	Etc.	
4	Etc.	<3am end loc>	



If Google returns trip distances, show Appx distance. If Google fails to return driving distances due to flight or ferry trip, hide that column.

Show an error message when gdistance=0 for 1+ trips. Error message text:

NOTE: error message should not stop participants from proceeding. It is simply a warning.

One or more trips are reported as 0 miles long. Press “Previous” to return to the list of locations and ensure that the same location isn’t listed twice in a row.

Show page if made trips on travel day and age 16+.

Did <Name/you> make any of the following kinds of trips (or part of a trip) on <travel date>?

Auto trips where parking was not free?

Auto trips using a [HOV](#) lane?

Auto trips using a [HOT](#) lane, toll road, toll bridge, or ferry?

“HOT” Pop-up text:

A high-occupancy toll (HOT) lane is a restricted traffic lane reserved for the exclusive use of vehicles that have paid a toll (e.g., I-95/495 Express Lanes, I-95 Express Toll Lanes).

“HOV” Pop-up text:

“A high-occupancy vehicle (HOV) lane is a restricted traffic lane reserved for the exclusive use of vehicles with a driver and one or more passengers (e.g., I-395 HOV, I-66 HOV, VA-267 HOV, I-270 HOV; US-50 HOV). Do not include HOT lanes (I-95/495 Express Lanes, I-95 Express Toll Lanes) or HOV lanes on surface streets (Alexandria, VA).”

Trip filter: response options

[use_toll]

- 1 Yes
- 2 No

[use_hov]

- 1 Yes
- 2 No

[use_paidpark]

- 1 Yes
- 2 No

General layout for trip detail questions. See following pages for mode-specific questions

Please tell us about <Name's/your> trip from <trip origin> to <trip destination>.

Viewing trip x of n trip(s).

<Name's/Your> Travel Day
Trip 1: <3am start loc> to <place 2>
Trip 2: <place 2> to <place 3>
Trip 3: <etc.>
Trip n: <last location> to <3am end loc>

Location reminders:
WORK is located at <Job 1 street address>
WORK2 is located at <Job 2 street address>
WORK3 is located at <Job 3 street address>

Time departed from <origin>

Select... ▼

Time arrived at <destination>

Select... ▼

[If hhsize > 1] Other household members who traveled on trip (select all that apply)

☐

<Member 1>

☐

<Member 2>

☐

Just <Name/you>
(no other household members)

Number of people who traveled with <Name/you> who are NOT household members (e.g., friends or co-workers)

Select... ▼

Primary activity at <destination>

Select... ▼

[show if activity1 <> Prefer not to answer, OR Don't know] Additional activity at <destination>

Select... ▼

[show if activity2 <> No other activities at this place, Prefer not to answer, OR Don't know] Additional activity at <destination>

Select... ▼

[show if activity3 <> No other activities at this place, Prefer not to answer, OR Don't know] Additional activity at <destination>

Select... ▼

[show if activity4 <> No other activities at this place, Prefer not to answer, OR Don't know] Additional activity at <destination>

Select... ▼

Trip Detail: response options

[departure_time]

Range from “Before 3am” to “2:59 am (next day)”
Never show “3am or later (next day)” for trip start time

Trip start must be the same as or later than the end time of the previous trip

[arrival_time]

Range from “3:00 am” to “3am or later (next day)”
Never show “Before 3am” for trip end time

Trip end time must be later than trip start time

[hhmember1– hhmember(max)]:

All HH members are listed.

[nonhh]

- 0 No other people
- 1 1 other person
- 2 2 other people
- 3 3 other people
- 4 4 other people
- 5 5 or more other people

[activity1 – activity5]	
0	[hide for primary activity] No other activities at this place
1	At home activity (typical household responsibilities/relax/sleep)
2	Work at home or telework (for pay)
3	Work at regular workplace or other work location)
4	Work-related activity (e.g., meeting, conference, sales call)
5	Volunteer activity
6	Drop off/pick up someone
7	Attend school/class as a student
8	Attend other school-related activity
9	Receive childcare or preschool services
10	Receive adult care services
11	Shop in store (for groceries, clothing, other goods)
12	Eat a meal/have coffee or drink (outside of home or work)
13	Quick stop to pick up food or coffee
14	Fuel vehicle/get gas
15	Receive healthcare services (e.g., medical, dental, etc.)
16	Receive personal services (e.g., banking, dry cleaning, grooming, pet care, automotive service)
17	Entertainment (e.g., movies, plays, concerts)
18	Socialize (e.g., visit friends/relatives)
19	Recreation (e.g., sporting event, visit parks, museums, vacation)
20	Exercise (e.g., gym, jog/run, bike ride, walk dog)
21	Governmental, civic, or religious activity
22	Mail package/letter or other postal activity
23	Change travel mode (e.g., wait for plane, inter-city train, or bus)
997	Other, please specify _____ Write-in required when “Other” is selected.
998	Don’t know
999	Prefer not to answer

General layout for trip detail questions. See following pages for mode-specific follow-up questions

Please tell us about <Name's/your> trip from <trip origin> to <trip destination>.

Please select all modes used for this trip.

- ☐ Walk (or jog/wheelchair)
- ☐ Bicycle
- ☒ [Hide if 0 vehicle HH] Household vehicle
- ☐ Other car, truck, or van (e.g., someone else's car, rental vehicle, etc.)
- ☐ Ride-hailing service (e.g., Uber, Lyft)
- ☐ Taxi or private limo service
- ☐ School bus
- ☐ Local Bus
- ☐ Light rail or streetcar
- ☐ Subway (e.g., Metrorail, Baltimore Metro)
- ☐ Commuter rail (e.g., MARC, VRE)
- ☐ Commuter or express bus
- ☐ MetroAccess or Dial-A-Ride Bus
- ☒ Shuttle bus (e.g., hotel, airport, or employer shuttle bus)
- ☐ Ferry, water taxi, or boat
- ☐ Intercity bus (e.g., Greyhound, BoltBus)
- ☐ Intercity rail (e.g., Amtrak)
- ☐ Airplane or helicopter
- ☐ Other, please specify _____ Write-in required when "Other" is selected.

Pop-up "Shuttle Bus"
Includes any type of shuttle bus such as employee, campus, apartment complex, car dealer, social service agency, hotel, or airport.

Viewing trip x of n trip(s).

<Name's/Your> Travel Day
Trip 1: <3am start loc> to <place 2>
Trip 2: <place 2> to <place 3>
Trip 3: <etc.>
Trip n: <last location> to <3am end loc>

Location reminders:
WORK is located at <Job 1 street address>
WORK2 is located at <Job 2 street address>
WORK3 is located at <Job 3 street address>

If NONE of the following modes are selected:

- HH vehicle
- Other vehicle
- Subway
- Light rail or streetcar
- Local bus
- Commuter bus
- Commuter rail
- School bus

THEN participant is NOT asked any follow-up questions and proceeds to "Closing" section (slide 40).

[mode] *List repeated with values.*

- 1 Walk (or jog/wheelchair)
- 2 Bicycle
- 3 *[Hide if 0 vehicle HH]* Household vehicle
- 4 Other car, truck, or van (e.g., someone else's car, rental vehicle, etc.)
- 6 Ride-hailing service (e.g., Uber, Lyft)
- 5 Taxi or private limo service
- 8 School bus
- 23 Local Bus
- 42 Light rail or streetcar
- 14 Subway (e.g., Metrorail, Baltimore Metro)
- 13 Commuter rail (e.g., MARC, VRE)
- 55 Commuter or express bus
- 12 MetroAccess or Dial-A-Ride Bus
- 11 [Shuttle bus](#) (e.g., hotel, airport)
- 16 Ferry, water taxi, or boat
- 15 Intercity bus (e.g., Greyhound, BoltBus)
- 10 Intercity rail (e.g., Amtrak)
- 17 Airplane or helicopter
- 997 Other *Write-in required when "Other" is selected.*

SUBWAY ACCESS

follow-up questions: shown if participant reports using SUBWAY alone, or SUBWAY and any other mode

Viewing trip x of n trip(s).

<Name's/Your> Travel Day
Trip 1: <3am start loc> to <place 2>
Trip 2: <place 2> to <place 3>
Trip 3: <etc.>
Trip n: <last location> to <3am end loc>

Location reminders:

WORK is located at <Job 1 street address>
WORK2 is located at <Job 2 street address>
WORK3 is located at <Job 3 street address>

Please tell us about <Name's/your> trip from <origin> to <destination>.

Where did <Name/you> board the first transit vehicle used on this trip?

Select...▼

How did <Name/you> get to the <subwayaccess_loc>?

Select...▼

[if subwayaccess_mode1 = drove alone or drove with others to transit system] What vehicle did <Name/you> drive?

Select...▼

[if subwayaccess_mode1 = drove alone or drove with others to transit system]

Where was the vehicle parked at/near <subwayaccess_loc>?

Select...▼

[If paid for parking on travel date AND park_loc= lot/garage, on-street, park/ride] Did <Name/you> pay for parking?

Select...▼

[If subwayaccess_loc = Washington Metrorail Station OR Baltimore Metro Station] At which <subwayaccess_loc> did <Name/you> board?

Select...▼

[If subwayaccess_loc <> Washington Metrorail Station OR Baltimore Metro Station] Which of the following subway systems did <Name/you> first use on this trip?

Select...▼

[If subway_system_1 = Washington Metrorail Station OR Baltimore Metro Station] At which <subway_system_1> station did <Name/you> board?

Select...▼

[If subway_system_1 = Washington Metrorail Station OR Baltimore Metro Station] How did <Name/you> get to the <subway_system_1> station?

Select...▼

Trip details SUBWAY ACCESS FOLLOW-UPS: response options

[subwayaccess_loc]

- 1 Bus stop
- 2 Park and ride lot
- 3 Commuter rail station
- 4 Washington Metrorail station
- 5 Baltimore Metro station
- 6 Other subway station
- 7 Light rail station or streetcar stop
- 997 Other location

[subwayaccess_mode]

- 1 Walked or jogged
- 2 Rode a bike
- 3 [if has license] Drove alone and parked
- 4 [if has license and travel party 2+] Drove with others and parked
- 5 [if travel party 2+] Was dropped off in vehicle
- 6 [if travel party 2+] Was picked up in vehicle
- 7 MetroAccess or Dial-A-Ride Bus
- 8 Shuttle Bus
- 9 Taxi, limo, or other hired car service
- 10 Ride share service (e.g., Uber, Lyft)
- 997 Other

[subwayaccess_mode_vehicle]

- [show if "HH Vehicle" chosen in mode list]
- List of household vehicles by name (year make model)
- 1 <HH vehicle 1>
- 2 <HH vehicle 2>
- 3 <HH vehicle 3>
- 4 <HH vehicle 4>
- 5 <HH vehicle 5>
- 6 <HH vehicle 6>
- 7 <HH vehicle 7>
- 8 <HH vehicle 8>
- [show if "other vehicle" chosen in mode list]
- 9 Rental vehicle
- 10 Vehicle from work
- 11 Other person's vehicle
- 12 Carshare vehicle (e.g. Car2Go)
- 13 Motorcycle/moped/scooter
- 997 Other vehicle

[subwayaccess_park_loc]

- 1 [Hide if destination is not home] Own driveway/garage
- 2 Someone else's driveway
- 3 Parking lot/garage
- 4 On street parking
- 5 Park & ride lot
- 6 Didn't park (waited, drop-off, drive-thru)
- 997 Other

[subwayaccess_park_pay]

- 1 No, parking was free
- 2 [hide if employed = no] No, employer paid
- 3 No, paid by store, restaurant, hospital, etc.
- 4 Yes, paid with cash, credit card, or prepaid ticket
- 5 Yes, paid with SmarTrip or CharmCard
- 998 Don't know
- 997 Other

[subway_station_board]

- [if transitaccess_loc= Washington Metrorail] list of Washington Metrorail stations
- [if selected Baltimore Metro station] list of Baltimore Metro stations

[subway_system_board]

- 1 Washington Metrorail station
- 2 Baltimore Metro station
- 997 Other subway station

[subway_station_access]

- [if transitaccess_loc= Washington Metrorail] list of Washington Metrorail stations
- [if selected Baltimore Metro station] list of Baltimore Metro stations

[subwaytransfer_mode1]

- 1 Commuter rail
- 2 Commuter bus
- 3 Local bus
- 4 Light rail or streetcar
- 5 MetroAccess or Dial-A-Ride Bus
- 6 Shuttle Bus
- 7 Taxi, limo, or other hired car service
- 8 Ride share service (e.g., Uber, Lyft)
- 9 Was dropped off in vehicle
- 997 Other

SUBWAY EGRESS

follow-up questions: shown if participant reports using SUBWAY alone, or SUBWAY and any other mode

Please tell us about <Name's/your> trip from <origin> to <destination>.

Viewing trip <x> of <n> total trip(s).

Where did <Name/you> exit the last transit vehicle used on this trip?

Select... ▼

[If transitegress_loc = Washington Metrorail Station OR Baltimore Metro Station] At which <transitegress_loc> did <Name/you> exit?

Select... ▼

transitegress_loc <> Washington Metrorail Station OR Baltimore Metro Station] Which of the following subway systems did <Name/you> last use on this trip?

Select... ▼

[If subway_system_2 = Washington Metrorail Station OR Baltimore Metro Station] At which <subway_system_2> station did <Name/you> exit?

Select... ▼

How did <Name/you> pay the fare?

Select... ▼

[If transitegress_loc <> Washington Metrorail Station OR Baltimore Metro Station] What was the next mode of transportation <Name/you> used after leaving the <subway_system_2>?

Select... ▼

After exiting the last transit vehicle used, what was the next mode of transportation <Name/you> used on this trip?

Select... ▼

[if transitegress_mode1 = drove alone or drove with others] What vehicle did <Name/you> drive?

Select... ▼

[if transitegress_mode = drove alone or drove with others] Where was the vehicle parked at/near <destination>?

Select... ▼

[If paid for parking on travel date AND park_loc= lot/garage, on-street, park/ride] Did <Name/you> pay for parking?

Select... ▼

Trip details SUBWAY EGRESS FOLLOW-UPS: response options

[transitegress_loc]

- 1 Bus stop
- 2 Park and ride lot
- 3 Commuter rail station
- 4 Washington Metrorail station
- 5 Baltimore Metro station
- 6 Other subway station
- 7 Light rail station or streetcar stop
- 997 Other location

[subway_station_egress]

[if selected Washington Metrorail] list of Washington Metrorail stations
[if selected Baltimore Metro station] list of Baltimore Metro stations

[subway_system_egress]

- 1 Washington Metrorail station
- 2 Baltimore Metro station
- 997 Other subway station

[subway_station_egress]

[if selected Washington Metrorail] list of Washington Metrorail stations
[if selected Baltimore Metro station] list of Baltimore Metro stations

[transit_pay]

- 1 SmarTrip (regular fare)
- 2 CharmCard (regular fare)
- 3 Single trip fare (cash, credit, ticket or token)
- 4 Round trip fare (cash, credit, ticket or token)
- 5 Monthly pass (any transit operator or mode)
- 6 Weekly pass (any transit operator or mode)
- 7 Daily pass (any transit operator or mode)
- 8 TLC (Transit Link Card)
- 9 Senior/disabled pass, cash fare, or free fare
- 10 Youth/student pass, cash fare, or free fare
- 997 Other
- 998 Don't know

[transittransfer_mode2]

- 1 Commuter rail
- 2 Commuter bus
- 3 Local bus
- 4 Light rail or streetcar
- 5 MetroAccess or Dial-A-Ride Bus
- 6 Shuttle Bus
- 7 Taxi, limo, or other hired car service
- 8 Ride share service (e.g., Uber, Lyft)
- 9 Was dropped off in vehicle
- 997 Other

[transitegress_mode]

- 1 Walked or jogged
- 2 Rode a bike
- 3 *[if has license]* Drove alone and parked
- 4 *[if has license and travel party 2+]* Drove with others and parked
- ~~5 *[if travel party 2+]* Was dropped off in vehicle~~
- 6 *[if travel party 2+]* Was picked up in vehicle
- 7 MetroAccess or Dial-A-Ride Bus
- 8 Shuttle Bus
- 9 Taxi, limo, or other hired car service
- 10 Ride share service (e.g., Uber, Lyft)
- 997 Other

[transitegress_mode_vehicle]

- [show if "HH Vehicle" chosen in mode list]*
List of household vehicles by name (year make model)
1 <HH vehicle 1>
2 <HH vehicle 2>
3 <HH vehicle 3>
4 <HH vehicle 4>
5 <HH vehicle 5>
6 <HH vehicle 6>
7 <HH vehicle 7>
8 <HH vehicle 8>
[show if "other vehicle" chosen in mode list]
9 Rental vehicle
10 Vehicle from work
11 Other person's vehicle
12 Carshare vehicle (e.g. Car2Go)
- 13 Motorcycle/moped/scooter
- 997 Other vehicle

[transitegress_park_loc]

- 1 *[Hide if destination is not home]* Own driveway/garage
- 2 Someone else's driveway
- 3 Parking lot/garage
- 4 On street parking
- 5 Park & ride lot
- 6 Didn't park (waited, drop-off, drive-thru)
- 997 Other

[transitegress_park_pay]

- 1 No, parking was free
- 2 *[hide if employed = no]* No, employer paid
- 3 No, paid by store, restaurant, hospital, etc.
- 4 Yes, paid with cash, credit card, or prepaid ticket
- ~~5 Yes, paid with SmarTrip or CharmCard~~
- 998 Don't know
- 997 Other

TRANSIT (NO SUBWAY)

Follow-up questions: shown if participant reports using TRANSIT, or TRANSIT and any other mode (EXCEPT SUBWAY)

TRANSIT = Light-Rail or Streetcar, Local Bus, Commuter Bus, Commuter Rail

Please tell us about <Name's/your> trip from <origin> to <destination>.

Viewing trip <x> of <n> total trip(s).

Where did <Name/you> board the first transit vehicle used on this trip? Select... ▼

How did <Name/you> get to the <transitaccess_loc>? Select... ▼

[if transitaccess_mode = drove alone or drove with others] What vehicle did <Name/you> drive? Select... ▼

[if transitaccess_mode = drove alone or drove with others] Where was the vehicle parked at/near <transitaccess_loc>? Select... ▼

[If paid for parking on travel date AND park_loc= lot/garage, on-street, park/ride] Did <Name/you> pay for parking? Select... ▼

Where did <Name/you> exit the last transit vehicle used on this trip? Select... ▼

How did <Name/you> pay the fare? Select... ▼

After exiting the last transit vehicle used, what was the next mode of transportation <Name/you> used on this trip? Select... ▼

[if transitegress_mode = drove alone or drove with others] What vehicle did <Name/you> drive? Select... ▼

[if transitegress_mode = drove alone or drove with others] Where was the vehicle parked at/near <destination>? Select... ▼

[If paid for parking on travel date AND park_loc= lot/garage, on-street, park/ride] Did <Name/you> pay for parking? Select... ▼

Trip details TRANSIT ACCESS (NO SUBWAY) FOLLOW-UPS: response options

[transitaccess_loc]

- 1 Bus stop
- 2 Park and ride lot
- 3 Commuter rail station
- 4 Washington Metrorail station
- 5 Baltimore Metro station
- 6 Other subway station
- 7 Light rail station or streetcar stop
- 997 Other location

[transitaccess_mode_vehicle]

- [show if "HH Vehicle" chosen in mode list]*
- List of household vehicles by name (year make model)*
- 1 <HH vehicle 1>
- 2 <HH vehicle 2>
- 3 <HH vehicle 3>
- 4 <HH vehicle 4>
- 5 <HH vehicle 5>
- 6 <HH vehicle 6>
- 7 <HH vehicle 7>
- 8 <HH vehicle 8>
- [show if "other vehicle" chosen in mode list]*
- 9 Rental vehicle
- 10 Vehicle from work
- 11 Other person's vehicle
- 12 Carshare vehicle (e.g. Car2Go)
- 13 Motorcycle/moped/scooter
- 997 Other vehicle

[transitaccess_mode]

- 1 Walked or jogged
- 2 Rode a bike
- 3 *[if has license]* Drove alone and parked
- 4 *[if has license and travel party 2+]* Drove with others and parked
- 5 *[if travel party 2+]* Was dropped off in vehicle
- ~~6 *[if travel party 2+]* Was picked up in vehicle~~
- 7 MetroAccess or Dial-A-Ride Bus
- 8 Shuttle Bus
- 9 Taxi, limo, or other hired car service
- 10 Ride share service (e.g., Uber, Lyft)
- 997 Other

[transitaccess_park_loc]

- ~~1 *[Hide if destination is not home]* Own driveway/garage~~
- 2 Someone else's driveway
- 3 Parking lot/garage
- 4 On street parking
- 5 Park & ride lot
- ~~6 Didn't park (waited, drop-off, drive-thru)~~
- 997 Other

[transitaccess_park_pay]

- 1 No, parking was free
- 2 *[hide if employed = no]* No, employer paid
- ~~3 No, paid by store, restaurant, hospital, etc.~~
- 4 Yes, paid with cash, credit card, or prepaid ticket
- 5 Yes, paid with SmarTrip or CharmCard
- 998 Don't know
- 997 Other

Trip details TRANSIT EGRESS (NO SUBWAY) FOLLOW-UPS: response options

[transitegress_loc]

- 1 Bus stop
- 2 Park and ride lot
- 3 Commuter rail station
- ~~4 Washington Metrorail station~~
- ~~5 Baltimore Metro station~~
- ~~6 Other subway station~~
- 7 Light rail station or streetcar stop
- 997 Other location

[transit_pay]

- 1 SmarTrip (regular fare)
- 2 CharmCard (regular fare)
- 3 Single trip fare (cash, credit, ticket or token)
- 4 Round trip fare (cash, credit, ticket or token)
- 5 Monthly pass (any transit operator or mode)
- 6 Weekly pass (any transit operator or mode)
- 7 Daily pass (any transit operator or mode)
- 8 TLC (Transit Link Card)
- 9 Senior/disabled pass, cash fare, or free fare
- 10 Youth/student pass, cash fare, or free fare
- 997 Other
- 998 Don't know

[transitegress_mode]

- 1 Walked or jogged
- 2 Rode a bike
- 3 *[if has license]* Drove alone and parked
- 4 *[if has license and travel party 2+]* Drove with others and parked
- ~~5 *[if travel party 2+]* Was dropped off in vehicle~~
- ~~6 *[if travel party 2+]* Was picked up in vehicle~~
- 7 MetroAccess or Dial-A-Ride Bus
- 8 Shuttle Bus
- 9 Taxi, limo, or other hired car service
- 10 Ride share service (e.g., Uber, Lyft)
- 997 Other

[transitegress_mode_vehicle]

- [show if "HH Vehicle" chosen in mode list]*
- List of household vehicles by name (year make model)*
- 1 <HH vehicle 1>
- 2 <HH vehicle 2>
- 3 <HH vehicle 3>
- 4 <HH vehicle 4>
- 5 <HH vehicle 5>
- 6 <HH vehicle 6>
- 7 <HH vehicle 7>
- 8 <HH vehicle 8>
- [show if "other vehicle" chosen in mode list]*
- 9 Rental vehicle
- 10 Vehicle from work
- 11 Other person's vehicle
- 12 Carshare vehicle (e.g. Car2Go)
- 13 Motorcycle/moped/scooter
- 997 Other vehicle

[transitegress_park_loc]

- 1 *[Hide if destination is not home]* Own driveway/garage
- 2 Someone else's driveway
- 3 Parking lot/garage
- 4 On street parking
- 5 Park & ride lot
- 6 Didn't park (waited, drop-off, drive-thru)
- 997 Other

[transitegress_park_pay]

- 1 No, parking was free
- 2 *[hide if employed = no]* No, employer paid
- 3 No, paid by store, restaurant, hospital, etc.
- 4 Yes, paid with cash, credit card, or prepaid ticket
- ~~5 Yes, paid with SmarTrip or CharmCard~~
- 998 Don't know
- 997 Other

SCHOOL BUS follow-up questions: Shown if mode = school bus
Time, travel party, purpose & mode questions asked of everyone (see previous slides).
Please tell us about **<Name's/your>** trip from **<origin>** to **<destination>**.

Viewing trip **<x>** of **<n>** total trip(s).

Where did **<Name/you>** board the school bus?

[If boarded at bus stop] How did **<Name/you>** travel from **<origin>** to the school bus stop?

Where did **<Name/you>** exit the school bus?

[If exited at bus stop] How did **<Name/you>** travel from the school bus stop to **<destination>**?

Trip Detail Questions SCHOOL BUS FOLLOW-UPS: response options

[schoolbus_board_loc] schoolbus_board_loc

- 1 Bus stop
- 2 School
- 997 Other location, please specify: _____

[schoolbus_access]

- 1 Walked
- 2 Rode a bike
- 3 Was dropped off (household vehicle used)
- 4 Was dropped off (other vehicle)
- 997 Other, please specify: _____

[schoolbus_exit_loc]

- 1 Bus stop
- 2 School
- 997 Other location, please specify: _____

[schoolbus_egress]

- 1 Walked
- 2 Rode a bike
- 3 Was dropped off (household vehicle used)
- 4 Was dropped off (other vehicle)
- 997 Other, please specify: _____

AUTO (NO TRANSIT, NO SUBWAY) follow-up questions:

Shown if mode = AUTO, or AUTO and any other mode (EXCEPT TRANSIT, SUBWAY)

AUTO= hh vehicle or other vehicle

Please tell us about <Name's/your> trip from <origin> to <destination>.

Viewing trip <x> of <n> total trip(s).

[if HH vehicle selected as mode] What household vehicle was used?

Select...▼

[if other vehicle selected as mode] What non-household vehicle was used?

Select...▼

[If has license AND travel party = 2+] <Was Name/Were you> the driver or passenger?

Select...▼

[If used HOT, toll bridge, ferry on travel date and driver] Was a HOT lane, toll road, toll bridge, or ferry used for any part of this trip?

Select...▼

[If used HOT, toll bridge, ferry on trip and driver] Select all HOT lanes, toll roads, toll bridges, and ferries that were used on this trip.

☐ *List of HOT, bridges, ferries (see next slide)*

☐ 1

☐ 2

☐ 3

☐

[If travel party = 2+ AND used HOV on travel date and driver] Was a HOV lane used for any part of this trip?

Select...▼

[If used HOV on trip and driver] Select all HOV lanes that were used on this trip.

☐ *List of HOV lanes (see next slide)*

☐ 1

☐ 2

☐ 3

☐

[If driver] Where was the vehicle parked at/near <destination>?

Select...▼

[If paid for parking on travel date AND park_loc= lot/garage, on-street, park/ride and driver] Did <Name/you> pay for parking?

Select...▼

Trip details AUTO (NO TRANSIT,SUBWAY) FOLLOW-UPS: response options

[hhvehicle_used]

List of household vehicles by name (year make model)

- 1 <HH vehicle 1>
- 2 <HH vehicle 2>
- 3 <HH vehicle 3>
- 4 <HH vehicle 4>
- 5 <HH vehicle 5>
- 6 <HH vehicle 6>
- 7 <HH vehicle 7>
- 8 <HH vehicle 8>

[othervehicle_used]

- 9 Rental vehicle
- 10 Vehicle from work
- 11 Someone else’s vehicle
- 12 Carshare vehicle (e.g. Car2Go)
- 13 Motorcycle/moped/scooter
- 997 Other vehicle

[driver]

- 1 Driver
- 2 Passenger
- 3 Both (switched drivers during trip)

[HOV_lane]

- 2 No
- 1 Yes

[toll_road]

- 2 No
- 1 Yes

[park_loc]

- 1 [Hide if destination is not home] Own driveway/garage
- 2 Someone else’s driveway
- 3 Parking lot/garage
- 4 On street parking
- 5 Park & ride lot
- 6 Didn’t park (waited, drop-off, drive-thru)
- 997 Other

[park_pay]

- 1 No, parking was free
- 2 [hide if employed = no] No, employer paid
- 3 No, paid by store, restaurant, hospital, etc.
- 4 Yes, paid with cash, credit card, or prepaid ticket
- 5 Yes, paid with SmarTrip or CharmCard
- 998 Don’t know
- 997 Other

HOV - list participants will select from	
1	I-66 inside the Capital Beltway
2	I-66 outside the Capital Beltway
3	I-95/395 south of Edsall Road
4	I-395 north of Edsall Road
5	I-270 southbound from I-370 to I-495
6	I-270 northbound from I-495 to MD-121
7	US-50
8	VA-267 outside the Capital Beltway to VA-28 (Dulles Toll Road)
9	VA-267 inside the Capital Beltway to I-66
10	I-495 (Capital Beltway)

HOT Lanes/Toll Road/Bridge - list participants will select from

1	I-66 inside the Capital Beltway: SOV pay toll
2	I-95/395 south of Edsall Road: SOV & HOV 2 pay toll (HOV 3+ free with E-Z Pass Flex)
3	VA-267 outside the Capital Beltway to VA-28 (Dulles Toll Road): tolled for all SOV & HOV
4	VA-267 from VA-28 to US-15 Bypass (Dulles Greenway)
5	I-495: Toll SOV & HOV 2 (HOV 3+ free with E-Z Pass Flex)
6	US 301 Harry W. Nice (Potomac River) Bridge
7	MD-220 Intercounty Connector (ICC)
8	US-50/US-301 Chesapeake Bay Bridge
9	I-95 Fort McHenry Tunnel
10	I-895 Baltimore Harbor Tunnel
11	I-695 Francis Scott Key Bridge
12	I-95 Express Toll Lanes
13	White's Ferry

“Copy Trips” Feature

The following slides show the alternate questions that ask/allow household members to copy trips described by members who have already completed their diary.

Copy trips functionality applied to ALL trips EXCEPT when any of the following modes are selected:

- Local Bus
- Light rail or streetcar
- Subway (e.g., Metrorail, Baltimore Metro)
- Commuter rail (e.g., MARC, VRE)
- Commuter or express bus
- MetroAccess or Dial-A-Ride Bus

Any trip where one of the above modes is selected will be disqualified from using copy trips functionality.

First page shown after “proxy” if person was reported on a previous HH member’s trip where mode = AUTO and no other modes were selected.

Below is a list of trips that other household members reported making with <Name/you>. To make things easier, we can use the information they already provided if <Name/you> made these trips together.

Please confirm the trips that <Name/you> made.

Trip 1 st Reported by	Start location	End location	Start time	End time	Traveled on Trip	Confirm
Mom	Home	School	7:40 AM	7:55 AM	Adult 1, Child 2	<input type="checkbox"/>
Mom	School	Piano Lesson	2:55 PM	3:25 PM	Child 2	<input type="checkbox"/>
Mom	Piano Lesson	Gas Station	4:35 PM	4:50 PM	Adult 1	<input type="checkbox"/>
Mom	Gas Station	Home	5:00 PM	5:45 PM	Adult 1	<input type="checkbox"/>
					None of the above	<input type="checkbox"/>

Page shown if person was reported on and confirms a previous HH member's trips. If person was not reported on previous trips or chose not to confirm any of the trips, they will continue as normal from the "location start" question and enter a new roster

The "travel day" **began** at 3AM on **<assigned travel date>** and **ended** at 3AM on **<assigned travel date + 1 day>**.

Was the following trip the first trip <Name/you> made on <assigned travel date>?

Home to School, from **<time>** to **<time>**

- 1 Yes
- 2 No

Was the following trip the last trip <Name/you> made on <assigned travel date>?

Gas Station to Home, from **<time>** to **<time>**

- 1 Yes
- 2 No

If person confirms previous trips, but says they started or ended at a different location (i.e. they say "no" to one or both of the above questions), they will answer the location start and/or end questions before proceeding to the next page.

Show “trips_yesno2” if person confirmed 1+ copied trips

Thank you. Next, we will ask you to provide details about the trips <Name/you> made on <traveldate>.

Please review the definition of a “trip” below, then click “Next” to continue.

What is a trip?

A trip is anytime you travel from one place and stop at a new place.



What are some example trips?

- Drive to work
- Drop your child off at day care
- Walk to the bus stop
- Take a taxi to the airport
- Ride the bus to the bank
- Bike to school
- Carpool to a meeting

Page shown after person confirms start and end location of the travel day for people who were reported on and confirmed being on previous HH members' trips.

Please list, in order, all the places **<Name/you>** went between 3:00 AM on **<traveldate>** and 3:00 AM on **<traveldate +1>**.

Please provide a [unique name or short description](#) for each place visited. When all places are listed, click “Next” to continue.

Click and drag a place to re-order the list. Click the  icon next to a place to add a new one below. Click the  icon to remove a place.


<Name/You> **began** the day at:

HOME

Then went to:



SCHOOL

Then went to:

PIANO LESSON

Then went to:

Enter a name for this place



<Name/You> **ended** the day at:

HOME

<Name>'s frequent destinations:

- Home
- *[if geocoded 1st job]* Work located at <First Workplace Street Address>
- *[if geocoded 2nd job]* Work2 located at <Second Workplace Street Address>
- *[if geocoded 3rd job]* Work3 located at <Third Workplace Street Address>
- *[if geocoded school]* School

Example Travel Day	
Began day at:	Home
Then went to:	Children's school
Then went to:	Convenience store
Then went to:	Work
Then went to:	Lunch
Then went to:	Work
Then went to:	Off-site meeting
Then went to:	Work
Then went to:	Children's school
Then went to:	Drug store
Ended day at:	Home

[list all locations previously geocoded in Part 1 of the survey for this household member maximum of 5 locations (home, work 1, work 2, work 3, school)]

Copied trips are shown, new trip destinations can be inserted between
Multi-location geocoder will ask person to locate any NEW places, but not copied trips
Validation: ensure that copied trips don't create trips to/from the same location (0-mile trips)

Page shown for any previously reported trips that the person confirmed. (Respondent will report their **activities** for all copied trips as well as whether or not they **were driver or passenger**; all other trip details are automatically copied behind the scenes)

Here are the details for **<Name's/your>** trip from **<origin>** to **<destination>** that were reported by another member of your household:

Departed: **<origin>** at **<time>**

Arrived: **<destination>** at **<time>**

[If has license AND travel party = 2+ AND mode was a vehicle (HH or other)] <Was Name/Were you> the driver or passenger?

Select... ▼

Primary activity at <destination>

Select... ▼

Additional activity at <destination>

Select... ▼

[show if activity2 <> "No other activities at this place"] Additional activity at <destination>

Select... ▼

[show if activity2 <> "No other activities at this place"] Additional activity at <destination>

Select... ▼

[show if activity2 <> "No other activities at this place"] Additional activity at <destination>

Select... ▼

End of the “Copy Trips” Section

The rest of the survey is the same for all participants, whether they copied trips or not

Were there any trips taken by <Name/you> on <traveldate> not shown on My Travel Day?

- 1 Yes
- 2 No

My Travel Day
Trip 1: <3am start loc> to <place 2>
Trip 2: <place 2> to <place 3>
Trip 3: <etc.>
Trip n: <last location> to <3am end loc>

If yes forgot trips How many other trips taken by <Name/you> on <traveldate> are not shown on My Travel Day?

Hint: If you forgot to report that you left home to get something from the grocery store, that will be two trips. One trip, from home to the grocery store. And a second trip, from the grocery store to home.

- 2 2
- 3 3
- 4 4
- 5 5
- 6 6

Show this page if participant responds “Yes” forgot to list trips.

Please list the places **<Name/you>** traveled to on **<traveldate>** that have not already been reported.

Forgotten trip 1:

Started at:

Enter a name for this place

Ended at:

Enter a name for this place

Forgotten trip 2:

Started at:

Enter a name for this place

Ended at:

Enter a name for this place

<Name>’s frequent destinations:

Type **HOME** for your home

[if geocoded 1st job] Type **WORK** for your workplace at **<Job 1 Street Address>**

[if geocoded 2nd job] Type **WORK2** for your workplace at **<Job 2 Street Address>**

[if geocoded 3rd job] Type **WORK3** for your workplace at **<Job 3 Street Address>**

[if geocoded school] Type **SCHOOL** for your school

If participant responds “Yes” forgot to report trips, they will cycle back through the trip details questions for the NEW trips that have been listed only. The NEW reported trips will be shown in the trip table on the side. NEW trips will be stored in a separate “forgotten” trips table.

Only show to persons age 18+

~~Please tell us about activities that allowed <Name/you> to avoid making trips on <travel date>.~~

~~If employed full/part: How much did <Name/you> work at home or telecommute for pay on <travel date>?~~

~~Please estimate for all time worked (both during and outside regular business hours).~~

Numeric entry for 15 minute increments 0-24 hours

~~How much did <Name/you> shop online on <travel date>?~~

~~Please estimate for all time shopping online (whether or not a purchase was made).~~

Numeric entry for 15 minute increments 0-24 hours

~~On <travel date> how many walks did <Name/you> go on that have NOT already been reported?~~

~~This could have been a walk around the neighborhood, a jog, or walking the dog, etc.~~

Select... ▼

~~On <travel date> how many bike rides did <Name/you> go on that have NOT already been reported?~~

~~This could have been a bike ride around the neighborhood, a bike ride for exercise, or a quick bike ride to the store, etc.~~

Select... ▼

[walks_tripnum]

- 0 None
- 1 1
- 2 2
- 3 3
- 4 4 or more

[bikerides_tripnum]

- 0 None
- 1 1
- 2 2
- 3 3
- 4 4 or more

Only show to the first person age 18+ in the HH who is answering their diary. Subsequent adults (other adults in HH) don't need to answer question.

On **<traveldate>, which of the following occurred at **<Name's/your>** home? Select all that apply.**

- ☐ Mailed packages (e.g., FedEx, UPS, Post Office) were delivered
- ☐ Food (e.g., pizza, Chinese food) was delivered
- ☐ Someone came to do work at home (e.g., landscaping, cable service, house-cleaning, etc.)
- ☐ None of the above

Previous

Next

If selected mailed physical Walmart gift card

Only show to the first person age 18+ in the HH who is answering their diary. Subsequent adults (other adults in HH) don't need to answer question.

You have selected a mailed Walmart gift card, we need to confirm your name and physical mailing address where you would like the gift card to be shipped.

This information will ONLY be used to mail your gift card to you after your household has completed Part 2 of the survey and will never be shared or linked to your survey responses. Please view our [privacy policy](#) for more information.

Prepopulate with sample address info, leave name blank

Name	<input type="text"/>
Street Address	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Zip	<input type="text" value="Validate real zip code"/>

Thank you for your participation.

If you have any general comments that you would like to share, please enter them below and then click “Next.”

Any feedback you wish to share will remain anonymous. Please see our [privacy policy](#) for more information.

Otherwise, please click the “Next” button to submit your survey.

[If HHsize = 2+] If any household members still need to complete this survey, you will return to your household’s dashboard where you can start the next person’s survey.

Answering the text box is optional.

Show this page when all HH members have completed the diary

Congratulations, your household has completed the Regional Travel Survey!

Thank you very much for your participation in this important research.

[If gift card selected] Your household's thank you gift card will be sent to you within one month.

Do not show any incentive text to volunteer/review HHs (segnum = 99) or households that selected no incentive or made a donation to the American Red Cross.

You may now close your browser.

APPENDIX B - HOUSEHOLD FILE FORMAT

RTS Public Use Dataset**Household: Data dictionary****HOUSEHOLD_ID**

Value

Standard Attributes	Label	Household ID (unique)
	Type	Numeric
	Measurement	Nominal

IN_TPB

Value

Standard Attributes	Label	In TPB Modeled Area
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes

IN_BMC

Value

Standard Attributes	Label	In BMC Modeled Area
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes

HOME_STATE_FIPS

Value

Standard Attributes	Label	Home address: State FIPS Code
	Type	Numeric
	Measurement	Nominal

HOME_STATE_PUMA

Value

Standard Attributes	Label	Home address: State FIPS-PUMA (2010) Combination
	Type	String
	Measurement	Nominal

AREA_TYPE

Value

Standard Attributes	Label	Home address: Area Type
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not in RTS Activity Center(TPB)
	1	In RTS Activity Center(TPB)
	2	In Shirlington RTS Activity Center(ARL)
	3	In Columbia Pike RTS Activity Center(ARL)
	4	In Rosslyn-Ballston RTS Activity Center(ARL)
	5	In Pentagon-Crystal City RTS Activity Center(ARL)
	11	In MTS Transit Targeted Area Type (BMC)
	12	In MTS Other Targeted Area Type (BMC)

HOME_STATE_COUNTY_FIPS

Value

Standard Attributes	Label	Home address: State-County FIPS Code Combination
	Type	Numeric
	Measurement	Nominal

HOME_TRACT_FIPS

Value

Standard Attributes	Label	Home address: Census Tract (2010)
	Type	Numeric
	Measurement	Nominal

HOME_TPB_TAZ

Value

Standard Attributes	Label	Residence TPB Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3675	TPB TAZ Number

HOME_BMC_TAZ

Value

Standard Attributes	Label	Residence BMC Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3064	BMC TAZ10 Number

HOME_TYPE

Value

Standard Attributes	Label	Household residence type of structure
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Single-family house (detached)
	2	Single-family house (attached)
	3	Apartment/Condo
	4	Mobile home/trailer
	5	Dorm or institutional housing
Missing Values	-9	Not ascertained

MPO_HOME_TYPE

Value

Standard Attributes	Label	Household residence type of structure
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Single-family house detached from any other house
	2	Single-family attached house (rowhouse, duplex, townhouse)
	3	Building with 2-9 apartments/condos
	4	Building with 10-49 apartments/condos
	5	Building with 50 or more apartments/condos

	6	Mobile home/trailer
	7	Dorm or institutional housing
Missing Values	-9	Not ascertained

HOME_OWNERSHIP

		Value
Standard Attributes	Label	Household residence tenure status
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Own
	2	Rent
	3	Other
Missing Values	-9	Not ascertained

MPO_HOME_OWNERSHIP

		Value
Standard Attributes	Label	Household residence tenure status
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Own/Buying (paying mortgage)
	2	Rent
	3	Provided by job or military
	4	Provided by family, relative, or friend without payment of rent
	5	Other
	6	Prefer not to answer
Missing Values	-9	Not ascertained

HHSIZE

		Value
Standard Attributes	Label	Number of household members
	Type	Numeric
	Measurement	Scale
Valid Values	1	1 household member
	8	8 or more household members

NUMSTUDENTS

		Value
Standard Attributes	Label	Number of students in household
	Type	Numeric
	Measurement	Scale
Valid Values	0	0 (no students)
	8	8 or more students

NUMDRIVERS

		Value
Standard Attributes	Label	Number of household members with a license
	Type	Numeric
	Measurement	Scale
Valid Values	0	0 (no licensed drivers)
	8	8 or more licensed drivers

NUMWORKERS			Value
Standard Attributes	Label	Number of workers in household	
	Type	Numeric	
	Measurement	Scale	
Valid Values	0	0 (no workers)	
	8	8 or more workers	

NUMDISABILITIES			Value
Standard Attributes	Label	Number of household members age 5+ with a disability or illness that affects ability to travel	
	Type	Numeric	
	Measurement	Scale	
Valid Values	0	0 (no persons with disabilities)	
	8	8 or more persons with disabilities	

NUMVEHICLE			Value
Standard Attributes	Label	Number of household vehicles	
	Type	Numeric	
	Measurement	Scale	
Valid Values	0	0 (no vehicles)	
	8	8 or more vehicles	

NUMVEHICLE_TRANSPONDER			Value
Standard Attributes	Label	Number of household vehicles with toll transponder	
	Type	Numeric	
	Measurement	Scale	
Valid Values	0	0 (no transponder)	
	8	8 or more transponders	

NUMBICYCLE			Value
Standard Attributes	Label	Number of household bicycles	
	Type	Numeric	
	Measurement	Scale	
Valid Values	0	0 (no bicycles)	
	5	5 or more bicycles	
Missing Values	-9	Not ascertained	

HH_INCOME_DETAILED			Value
Standard Attributes	Label	Household income: Detailed categories	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Less than \$15,000	
	2	\$15,000-\$24,999	
	3	\$25,000-\$34,999	

4	\$35,000-\$49,999
5	\$50,000-\$74,999
6	\$75,000-\$99,999
7	\$100,000-\$149,999
8	\$150,000 or more

MPO_HH_INCOME_DETAILED

			Value
Standard Attributes	Label	Household income: Detailed categories	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Less than \$10,000	
	2	\$10,000-\$14,999	
	3	\$15,000-\$24,999	
	4	\$25,000-\$34,999	
	5	\$35,000-\$49,999	
	6	\$50,000-\$74,999	
	7	\$75,000-\$99,999	
	8	\$100,000-\$149,999	
	9	\$150,000-\$199,999	
	10	\$200,000 or more	
Missing Values	-9	Not ascertained	

HH_INCOME_BROAD

			Value
Standard Attributes	Label	Household income: Broad categories	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Less than \$50,000	
	2	\$50,000 or more	

MPO_HH_INCOME_BROAD

			Value
Standard Attributes	Label	Household income: Broad categories	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Less than \$50,000	
	2	\$50,000 or more	
Missing Values	-9	Not ascertained	

TDATE_STRING

			Value
Standard Attributes	Label	Assigned travel date (string)	
	Type	String	
	Measurement	Nominal	

TDATE_DOW

			Value
Standard Attributes	Label	Pre-assigned travel day of week	
	Type	Numeric	
	Measurement	Nominal	

Valid Values	1	Monday
	2	Tuesday
	3	Wednesday
	4	Thursday
	5	Friday

HHTRIPS			Value
Standard Attributes	Label	Number of trips made by household members	
	Type		Numeric
	Measurement		Scale

PACKAGE_DELIVERED			Value
Standard Attributes	Label	Mailed packages were delivered to household on travel day (first person Age 18+ to answer Part 2 survey)	
	Type		Numeric
	Measurement		Nominal
Valid Values	0	No	
	1	Yes	

FOOD_DELIVERED			Value
Standard Attributes	Label	Food was delivered to household on travel day (first person Age 18+ to answer Part 2 survey)	
	Type		Numeric
	Measurement		Nominal
Valid Values	0	No	
	1	Yes	

SERVICE_DELIVERED			Value
Standard Attributes	Label	Someone came to do work at household address on travel day (first person Age 18+ to answer Part 2 survey)	
	Type		Numeric
	Measurement		Nominal
Valid Values	0	No	
	1	Yes	

WTHHFIN			Value
Standard Attributes	Label	Household Weighting Factor	
	Type		Numeric
	Measurement		Scale

HOME_OWNERSHIP_IMP			Value
Standard Attributes	Label	Home ownership - Imputation Flag	
	Type		Numeric
	Measurement		Nominal
Valid Values	0	False	

	1	True
Missing Values	-9	Not ascertained

HH_INCOME_DETAILED_IMP

		Value
Standard Attributes	Label	Household Income Detailed - Imputation Flag
	Type	Numeric
	Measurement	Nominal
Valid Values	0	False
	1	True
Missing Values	-9	Not ascertained

NUMDISABILITIES_IMP

		Value
Standard Attributes	Label	Number of household members age 5+ with a disability - Imputation Flag
	Type	Numeric
	Measurement	Nominal
Valid Values	0	False
	1	True
Missing Values	-9	Not ascertained

APPENDIX C - PERSON FILE FORMAT

RTS Public Use Dataset

Person: Data dictionary

HOUSEHOLD_ID

		Value
Standard Attributes	Label	Household ID (unique)
	Type	Numeric
	Measurement	Nominal

PERSON ID

		Value
Standard Attributes	Label	Person ID (unique)
	Type	String
	Measurement	Nominal

AGE

		Value
Standard Attributes	Label	Age
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Less than 1
	99	99 or older

AGE_GROUP

		Value
Standard Attributes	Label	Age: Broad follow-up categories (all respondents)
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Under 5 years old
	2	5-11 years
	3	12-13 years
	4	14-15 years
	5	16-17 years
	6	18-24 years
	7	25-34 years
	8	35-44 years
	9	45-54 years
	10	55-64 years
	11	65-74 years
	12	75-84 years
	13	85 years or older

GENDER

		Value
Standard Attributes	Label	Gender
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Female

	2	Male
Missing Values	-9	Not reported

RACEETHNICITY

		Value
Standard Attributes	Label	Race and ethnicity
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Hispanic or Latino
	2	African American or Black
	3	Asian
	4	White
	5	Other/Two or more races
Missing Values	-9	Not ascertained

MPO_RACEETHNICITY

		Value
Standard Attributes	Label	Race and ethnicity
	Type	Numeric
	Measurement	Nominal
Valid Values	1	African American or Black
	2	American Indian or Alaska Native
	3	Asian
	4	Hawaiian or Pacific Islander
	5	White
	6	Two or more races
	7	Hispanic or Latino
	997	Other
Missing Values	-9	Not ascertained

RACEETHNICITY_HISPANIC

		Value
Standard Attributes	Label	Race and ethnicity
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Of Hispanic or Latino origin
	2	Not of Hispanic or Latino origin
Missing Values	-9	Not ascertained

MPO_RACEETHNICITY_HISPANIC

		Value
Standard Attributes	Label	Race and ethnicity
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Of Hispanic or Latino origin
	2	Not of Hispanic or Latino origin
	998	Not Specified
Missing Values	-9	Not ascertained

LICENSE			
			Value
Standard Attributes	Label	Age 15+: Has valid drivers license	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Yes	
	2	No	
Missing Values	-9	Not ascertained	

DISABILITY			
			Value
Standard Attributes	Label	Age 5+: Has disability or illness that affects ability to travel	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Yes	
	2	No	
Missing Values	-9	Not reported	

SMARTPHONE			
			Value
Standard Attributes	Label	Age 16+: Owns smartphone	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Yes	
	2	No	
Missing Values	-9	Not ascertained	

EMPLOYMENT_STATUS			
			Value
Standard Attributes	Label	Age 16+: Employment status	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	0	Worker, including self employed	
	1	Retired	
	2	Volunteer	
	3	Homemaker	
	4	Unemployed but looking for work	
	5	Unemployed, not seeking employment	
	6	Student (part-time or full-time)	
	7	Disabled non-worker	
Missing Values	-9	Not ascertained	

MPO_EMPLOYMENT_STATUS			
			Value
Standard Attributes	Label	Age 16+: Employment status	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	No	

	2	Yes, employed full or part time
	3	Yes, unpaid family worker or intern
Missing Values	-9	Not ascertained

MPO_UNEMPLOYMENT_STATUS

		Value
Standard Attributes	Label	Age 16+: Employment status: Unemployed: Unemployment status
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Retired
	2	Disabled or on disability status
	3	Homemaker
	4	Student
	5	Not currently employed, but seeking employment
	6	Leave of absence or not currently seeking employment
Missing Values	-9	Not ascertained

JOBS_COUNT

		Value
Standard Attributes	Label	Age 16+ employed (full-time/part-time, unpaid family worker, or intern): Number of jobs
	Type	Numeric
	Measurement	Nominal
Valid Values	1	1 job
	5	5 or more jobs
Missing Values	-9	Not ascertained

MPO_J1_EMPLOYER_TYPE

		Value
Standard Attributes	Label	Employed: Job 1: Employer's type of organization
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Work for private for-profit firm/company
	2	Work for nonprofit firm/organization
	3	Work for federal government
	4	Work for state or local government
	5	Work for international governmental agency or organization
	6	Self employed
Missing Values	-9	Not ascertained

J1_WORKPLACE_LOC

		Value
Standard Attributes	Label	Employed: Job 1: Usual work location
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Usually the same location (outside home)

	2	Workplace regularly varies (different offices or jobsites)
	3	At home (telecommute or self-employed with home office)
	4	Drives for a living (e.g., bus driver, salesperson)
Missing Values	-9	Not ascertained

WORK_STATE_FIPS			Value
Standard Attributes	Label	WORK address: State FIPS Code	
	Type	Numeric	
	Measurement	Nominal	

WORK_STATE_COUNTY_FIPS			Value
Standard Attributes	Label	WORK address: State-County FIPS Code Combination	
	Type	Numeric	
	Measurement	Nominal	

WORK_TRACT_FIPS			Value
Standard Attributes	Label	WORK address: Census Tract (2010)	
	Type	Numeric	
	Measurement	Nominal	

WORK_TPB_TAZ			Value
Standard Attributes	Label	Work TPB Transportation Analysis Zone	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1 to 3675	TPB TAZ Number	

WORK_BMC_TAZ			Value
Standard Attributes	Label	Work BMC Transportation Analysis Zone	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1 to 3064	BMC TAZ10 Number	

J1_COMMUTE_FREQ			Value
Standard Attributes	Label	Employed: Job 1: If travels to fixed or varied workplace: Usual number of weekday commutes per week	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	5 weekdays a week	
	2	4 weekdays a week	

	3	3 weekdays a week
	4	2 weekdays a week
	5	1 weekday a week
	6	Weekends only
	7	Less than four weekdays per month
	8	Schedule varies week-to-week
Missing Values	-9	Not ascertained

J1_COMMUTE_MODE

		Value
Standard Attributes	Label	Employed: Job 1: If commutes: Usual way of commuting to primary workplace
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Walk (or jog, wheelchair)
	2	Bicycle
	3	Drive alone or drive others
	4	Auto passenger
	5	Carpool
	6	Bus transit
	7	Rail transit
	8	Transportation service (Taxi/Ride-Hail/Shuttle)
	9	Other
Missing Values	-9	Not ascertained

MPO_J1_COMMUTE_MODE

		Value
Standard Attributes	Label	Employed: Job 1: If commutes: Usual way of commuting to primary workplace
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Walk (or jog, wheelchair)
	2	Bicycle
	3	Drive alone in car, truck or van (if has a drivers license)
	4	Drive/carpool with ONLY family/household member(s)
	5	Carpool with at least one person NOT in household
	6	Motorcycle/moped/scooter
	7	Vanpool
	9	Local bus
	10	Subway (MetroRail, Baltimore Metro)
	11	Commuter rail (e.g., MARC, VRE)
	12	Streetcar/light rail
	13	Shuttle bus
	14	MetroAccess or Dial-A-Ride
	15	Taxi or other ride-hailing service (e.g., Lyft, Uber)
	997	Other
Missing Values	-9	Not ascertained

J1_TELECOMMUTE

Value

Standard Attributes	Label	Employed: Job 1: If travels to fixed or varied workplace: Eligibility to telecommute
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Employer offers option
	2	Employer does not offer option
Missing Values	-9	Not ascertained

MPO_J1_TELECOMMUTE

Value

Standard Attributes	Label	Employed: Job 1: If travels to fixed or varied workplace: Eligibility to telecommute
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Eligible to telecommute
	2	Eligible, but choose not to telecommute
	3	Not eligible to telecommute
Missing Values	-9	Not ascertained

J1_TELECOMMUTE_DAYS

Value

Standard Attributes	Label	Employed: Job 1: If travels to fixed or varied workplace: Usual number of weekday telecommutes per week
	Type	Numeric
	Measurement	Nominal
Valid Values	0	0 days
	1	1 day
	2	2 days
	3	3 days
	4	4 days
	5	5+ days
Missing Values	-9	Not ascertained

MPO_J1_TELECOMMUTE_DAYS

Value

Standard Attributes	Label	Employed: Job 1: If travels to fixed or varied workplace: Usual number of weekday telecommutes per week
	Type	Numeric
	Measurement	Nominal
Valid Values	3	Less than 4 weekdays per month
	4	1 weekday a week
	5	2 weekdays a week
	6	3 weekdays a week
	7	4 weekdays a week

	8	5 weekdays a week
	9	Weekends only
Missing Values	-9	Not ascertained

J1_BENEFITS_FREE_PARKING

		Value
Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: Free parking
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

J1_BENEFITS_PARKING

		Value
Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: Subsidized/Pre-Tax benefit for parking
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

J1_BENEFITS_TRANSIT

		Value
Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: Subsidized/Pre-Tax benefit for transit use
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

J1_BENEFITS_CARPOOL

		Value
Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: Cash or other incentives for carpool and vanpool
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

J1_BENEFITS_WALKING_BIKING

		Value
--	--	-------

Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: Cash or other incentives for walking or biking to work
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

J1_BENEFITS_EV_CHARGING

		Value
Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: Electric vehicle charging station
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

J1_BENEFITS_BICYCLE_PARKING

		Value
Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: Secure bicycle parking facility
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

J1_BENEFITS_NONE

		Value
Standard Attributes	Label	Employed: Job 1: If usual work location is not home: Transportation Benefits Offered: None, employer doesn't offer any transportation benefits
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

STUDENT_STATUS

		Value
Standard Attributes	Label	Student status: Child or adult (derived)
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No, not a student
	1	Yes, full-time or part-time student

Missing Values	-9	Not ascertained
----------------	----	-----------------

SCHOOL_TYPE

		Value
Standard Attributes	Label	If under age 18 or adult student: Type of school attended
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Daycare / Nursery / Pre-school
	2	K - 8th grade
	3	9th - 12th grade
	4	Home school
	5	Vocational/Technical school
	6	2-year college (community college)
	7	4-year college or university
	8	Graduate/Professional school
	9	Other
Missing Values	-9	Not ascertained

MPO_SCHOOL_TYPE

		Value
Standard Attributes	Label	If under age 18 or adult student: Type of school attended
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Daycare
	2	Nanny/babysitter
	3	Nursery School, Preschool
	4	Kindergarten - Grade 8 (public or private)
	5	Grade 9-12 (public or private)
	6	Home school (K-12)
	7	Technical/Vocational school
	8	2 year college
	9	4 year college or university
	10	Graduate/Professional School
	997	Other
Missing Values	-9	Not ascertained

SCHOOL_STATE_FIPS

		Value
Standard Attributes	Label	SCHOOL address: State FIPS Code
	Type	Numeric
	Measurement	Nominal

SCHOOL_STATE_COUNTY_FIPS

		Value
Standard Attributes	Label	SCHOOL address: State-County FIPS Code Combination
	Type	Numeric

Measurement		Nominal
SCHOOL_TRACT_FIPS		
		Value
Standard Attributes	Label	SCHOOL address: Census Tract (2010)
	Type	Numeric
	Measurement	Nominal
SCHOOL_TPB_TAZ		
		Value
Standard Attributes	Label	School TPB Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3675	TPB TAZ Number
SCHOOL_BMC_TAZ		
		Value
Standard Attributes	Label	School BMC Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3064	BMC TAZ10 Number
SCHOOL_FREQ		
		Value
Standard Attributes	Label	Student (adult or child): If school type is not homeschool, nanny/babysitter: How often travels to school
	Type	Numeric
	Measurement	Nominal
Valid Values	1	5 weekdays a week
	2	4 weekdays a week
	3	3 weekdays a week
	4	2 weekdays a week
	5	1 weekday a week
	6	Weekends only
	7	Less than four weekdays per month
	8	Never, only takes online classes (if age 5+)
Missing Values	-9	Not ascertained
SCHOOL_MODE		
		Value
Standard Attributes	Label	Student (adult or child): If school type is not homeschool, nanny/babysitter: If does not take online-classes only: Travel mode to school
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Walk
	2	Bicycle
	3	POV - Driver

	4	POV - Passenger
	5	Carpool
	6	Transit - Bus
	7	Transit - Rail
	8	Transportation service (Taxi/Rideshare/Shuttle)
	9	School bus
	10	Other
Missing Values	-9	Not ascertained

MPO_SCHOOL_MODE

		Value
Standard Attributes	Label	Student (adult or child): If school type is not homeschool, nanny/babysitter: If does not take online-classes only: Travel mode to school
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Walk (or jog, wheelchair)
	2	Bicycle
	3	Drive alone in car, truck or van (if has a drivers license)
	4	Drive/carpool with ONLY family/household member(s)
	5	Carpool with at least one person NOT in household
	6	Motorcycle/moped/scooter
	7	Vanpool
	8	School bus (if under age 25)
	9	Local bus
	10	Subway (MetroRail, Baltimore Metro)
	11	Commuter rail (e.g., MARC, VRE)
	12	Streetcar/light rail
	13	Shuttle bus
	14	MetroAccess or Dial-A-Ride
	15	Taxi or other ride-hailing service (e.g., Lyft, Uber)
	997	Other
Missing Values	-9	Not ascertained

VOLUNTEER_STATUS

		Value
Standard Attributes	Label	Age 16+: Volunteer status
	Type	Numeric
	Measurement	Nominal
Valid Values	1	No, do not currently volunteer
	2	Yes, currently volunteer
Missing Values	-9	Not ascertained

TRIPS_YESNO

		Value
Standard Attributes	Label	Made trips on travel day
	Type	Numeric

	Measurement	Nominal
Valid Values	1	Yes
	2	No

NO_TRAVEL

		Value
Standard Attributes	Label	Primary reason did not make trips on travel day
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Vacation / Personal day / Not scheduled to work
	2	Personally sick or caretaking for others
	3	Home-bound elderly or disabled
	4	Worked at home for pay
	5	Worked around home (not for pay)
	6	Out of area
	7	No transportation available
	8	Other
Missing Values	-9	Not ascertained

MPO_NO_TRAVEL

		Value
Standard Attributes	Label	Primary reason did not make trips on travel day
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Worked around home not for pay
	2	Was waiting for visitor/delivery
	3	Worked at home for pay
	4	Not scheduled to work/took day off
	5	Was sick or caring for another person
	6	Home-bound elderly or disabled
	7	Retired/Unemployed
	8	Baby or child under 5 at home all day
	9	Child 5 to 18 at home all day
	10	No class or class online (college student/adult)
	11	No transportation available
	12	Inclement weather
	13	Out of town
	14	Away at college, school or camp
	15	Visiting or staying with other relative
	16	Hospitalized or incarcerated
	17	No reason to go out/Resting at home
	997	Unknown other reason
	998	Prefer not to answer
Missing Values	-9	Not ascertained

TD_PAIDPARK

		Value
Standard Attributes	Label	Travel Day: Age 16+: Made auto trips where parking was not free on travel day

	Type	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No
Missing Values	-9	Not ascertained

TD_HOV

		Value
Standard Attributes	Label	Travel Day: Age 16+: Made auto trips using a HOV lane
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No
Missing Values	-9	Not ascertained

TD_TOLL

		Value
Standard Attributes	Label	Travel Day: Age 16+: Made auto trips using a HOT lane, toll road, toll bridge or ferry on travel day
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No
Missing Values	-9	Not ascertained

TD_TELECOMMUTE_TIME

		Value
Standard Attributes	Label	Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent teleworking/telecommuting (hour increment)
	Type	Numeric
	Measurement	Scale
Valid Values	0	0 (no telecommute)
	8	8 or more hours

MPO_TD_TELECOMMUTE_TIME

		Value
Standard Attributes	Label	Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent teleworking/telecommuting (nearest quarter hour)
	Type	Numeric
	Measurement	Scale

TD_SHOP_TIME

		Value
Standard Attributes	Label	Travel Day Time Use: Age 18+: Time spent shopping online (hour increment)
	Type	Numeric

	Measurement	Scale
Valid Values	0	0 (no shopping online)
	8	8 or more hours

MPO_TD_SHOP_TIME

		Value
Standard Attributes	Label	Travel Day Time Use: Age 18+: Time spent shopping online (nearest quarter hour)
	Type	Numeric
	Measurement	Scale

PERSON_TRIPCOUNT

		Value
Standard Attributes	Label	Number of trips made
	Type	Numeric
	Measurement	Scale

WALK_BIKE_LOOP_TRIPS

		Value
Standard Attributes	Label	Travel Day: Age 18+: Number of walk and bike loop trips
	Type	Numeric
	Measurement	Scale

WTPERFIN

		Value
Standard Attributes	Label	Household Weighting Factor
	Type	Numeric
	Measurement	Scale

WWM_WTPERFIN

		Value
Standard Attributes	Label	Household Weighting Factor adjusted for ACS Commuter Distribution and 2018 Metrorail Ridership Estimates
	Type	Numeric
	Measurement	Scale

AGE_IMP

		Value
Standard Attributes	Label	AGE - Imputation Flag
	Type	Numeric
	Measurement	Nominal
Valid Values	0	False
	1	True
Missing Values	-9	Not ascertained

GENDER_IMP

		Value
--	--	-------

Standard Attributes	Label	GENDER - Imputation Flag
	Type	Numeric
	Measurement	Nominal
Valid Values	0	False
	1	True
Missing Values	-9	Not ascertained

RACEETHNICITY_IMP

		Value
Standard Attributes	Label	RACE/ETHNICITY - Imputation Flag
	Type	Numeric
	Measurement	Nominal
Valid Values	0	False
	1	True
Missing Values	-9	Not ascertained

MPO_RACEETHNICITY_IMP

		Value
Standard Attributes	Label	RACE/ETHNICITY - Imputation Flag
	Type	Numeric
	Measurement	Nominal
Valid Values	0	False
	1	True
Missing Values	-9	Not ascertained

DISABILITY_IMP

		Value
Standard Attributes	Label	DISABILITY - Imputation Flag
	Type	Numeric
	Measurement	Nominal
Valid Values	0	False
	1	True
Missing Values	-9	Not ascertained

APPENDIX D - VEHICLE FILE FORMAT

RTS Public Use Dataset**Vehicle: Data dictionary****HOUSEHOLD_ID**

			Value
Standard Attributes	Label	Household ID (unique)	
	Type	Numeric	
	Measurement	Nominal	

VEHNUM

			Value
Standard Attributes	Label	Vehicle Number	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	0	0 (no vehicles)	
	8	8 or more vehicles	

YEAR

			Value
Standard Attributes	Label	Year (1980 is earliest year for RTS Households)	
	Type	Numeric	
	Measurement	Nominal	
Missing Values	-9	Not ascertained	

BODYTYPE

			Value
Standard Attributes	Label	Body type	
	Type	Numeric	
	Measurement	Nominal	
Valid Values	1	Car (or station wagon)	
	2	Van (any type)	
	3	SUV	
	4	Pickup Truck	
	5	Other type of truck	
	6	RV	
	7	Motorcycle	
	997	Other	
Missing Values	-9	Not ascertained	

MAKE

			Value
Standard Attributes	Label	Vehicle Make	
	Type	String	
	Measurement	Nominal	
Missing Values	-9	Not ascertained	

MODEL

			Value
--	--	--	-------

Standard Attributes	Label	Vehicle Model
	Type	String
	Measurement	Nominal
Missing Values	-9	Not ascertained

FUELTYPE

		Value
Standard Attributes	Label	Vehicle fuel type
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Gas
	2	Diesel
	3	Plug-in Hybrid
	4	Hybrid
	5	Electric
	6	Flex Fuel
	997	Other
Missing Values	-9	Not ascertained

TOLLTRANSPONDER

		Value
Standard Attributes	Label	Vehicle toll transponder
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Yes
	2	No
Missing Values	-9	Not ascertained

MPO_TOLLTRANSPONDER

		Value
Standard Attributes	Label	Vehicle toll transponder
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Yes, E-ZPass
	2	Yes, E-ZPass Flex
	3	Yes, other transponder (not E-ZPass)
	4	No
Missing Values	-9	Not ascertained

WTHHFIN

		Value
Standard Attributes	Label	Household Weighting Factor
	Type	Numeric
	Measurement	Scale

APPENDIX E - TRIP FILE FORMAT

RTS Public Use Dataset

Trip: Data dictionary

HOUSEHOLD_ID

		Value
Standard Attributes	Label	Household ID (unique)
	Type	Numeric
	Measurement	Nominal

PERSON_ID

		Value
Standard Attributes	Label	Person ID (unique)
	Type	String
	Measurement	Nominal

PERSNO

		Value
Standard Attributes	Label	Person number
	Type	Numeric
	Measurement	Nominal

TRIPID

		Value
Standard Attributes	Label	Trip ID (unique)
	Type	String
	Measurement	Nominal

TRIPNO

		Value
Standard Attributes	Label	Trip number
	Type	Numeric
	Measurement	Nominal

O_PURPOSE

		Value
Standard Attributes	Label	Origin purpose
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Home
	2	Work
	3	Work-related
	4	Shop
	7	Daycare
	8	School
	9	Other
	11	Drop Off/Pick Up Someone
	13	Parking Point
	16	Inter-City Rail Terminal

	17	Inter-City Bus Terminal
	18	Airport
	77	Gas/EV Charging Station
	99	External Point
Missing Values	-9	Not ascertained

O_ACTIVITY		
		Value
Standard Attributes	Label	Origin activity
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Home
	2	Work
	3	Volunteer
	4	School
	5	Shopping
	6	Meal (quick-stop)
	7	Meal
	8	Gas
	9	Health care
	10	Non-shopping errand
	11	Socialize
	12	Civic/Religious
	13	Exercise
	14	Recreation
	15	Entertainment
	16	Drop off/pick up
	18	Other
Missing Values	-9	Not ascertained

MPO_O_ACTIVITY		
		Value
Standard Attributes	Label	Origin activity
	Type	Numeric
	Measurement	Nominal
Valid Values	1	At home
	2	Work at home
	3	Work
	4	Work-related
	5	Volunteer
	6	Drop off/pick up
	7	Attend school
	8	Other school-related
	9	Childcare
	10	Adult care
	11	Shop
	12	Meal/coffee or drink
	13	Quick stop food/coffee
	14	Fuel vehicle

	15	Healthcare
	16	Personal services
	17	Entertainment
	18	Socialize
	19	Recreation
	20	Exercise
	21	Civic/Religious
	22	Postal
	24	Airport
	25	Inter-City Train Terminal
	26	Inter-City Bus Terminal
	60	Parking Location
	996	Other Residence/Hotel/Resort
	997	Other
Missing Values	-9	Not ascertained

O_STATE_FIPS		
		Value
Standard Attributes	Label	ORIGIN address: State FIPS Code
	Type	Numeric
	Measurement	Nominal

O_STATE_COUNTY_FIPS		
		Value
Standard Attributes	Label	ORIGIN address: State-County FIPS Code Combination
	Type	Numeric
	Measurement	Nominal

O_TRACT_FIPS		
		Value
Standard Attributes	Label	ORIGIN address: Census Tract (2010)
	Type	Numeric
	Measurement	Nominal

O_TPB_TAZ		
		Value
Standard Attributes	Label	Origin TPB Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3675	TPB TAZ Number

O_BMC_TAZ		
		Value
Standard Attributes	Label	Origin BMC Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3064	BMC TAZ10 Number

D_PURPOSE		
		Value
Standard Attributes	Label	Destination purpose
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Home
	2	Work
	3	Work-related
	4	Shop
	7	Daycare
	8	School
	9	Other
	11	Drop Off/Pick Up Someone
	13	Parking Point
	16	Inter-City Rail Terminal
	17	Inter-City Bus Terminal
	18	Airport
	77	Gas/EV Charging Station
	99	External Point
Missing Values	-9	Not ascertained

D_ACTIVITY		
		Value
Standard Attributes	Label	Destination activity
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Home
	2	Work
	3	Volunteer
	4	School
	5	Shopping
	6	Meal (quick-stop)
	7	Meal
	8	Gas
	9	Health care
	10	Non-shopping errand
	11	Socialize
	12	Civic/Religious
	13	Exercise
	14	Recreation
	15	Entertainment
	16	Drop off/pick up
	18	Other
Missing Values	-9	Not ascertained

MPO_D_ACTIVITY		
		Value
Standard Attributes	Label	Destination activity
	Type	Numeric

	Measurement	Nominal
Valid Values	1	At home
	2	Work at home
	3	Work
	4	Work-related
	5	Volunteer
	6	Drop off/pick up
	7	Attend school
	8	Other school-related
	9	Childcare
	10	Adult care
	11	Shop
	12	Meal/coffee or drink
	13	Quick stop food/coffee
	14	Fuel vehicle
	15	Healthcare
	16	Personal services
	17	Entertainment
	18	Socialize
	19	Recreation
	20	Exercise
	21	Civic/Religious
	22	Postal
	24	Airport
	25	Inter-City Train Terminal
	26	Inter-City Bus Terminal
	60	Parking Location
	996	Other Residence/Hotel/Resort
	997	Other
Missing Values	-9	Not ascertained

D_STATE_FIPS

		Value
Standard Attributes	Label	DESTINATION address: State FIPS Code
	Type	Numeric
	Measurement	Nominal

D_STATE_COUNTY_FIPS

		Value
Standard Attributes	Label	DESTINATION address: State-County FIPS Code
	Type	Combination
	Measurement	Nominal

D_TRACT_FIPS

		Value
Standard Attributes	Label	DESTINATION address: Census Tract (2010)
	Type	Numeric
	Measurement	Nominal

D_TPB_TAZ		
		Value
Standard Attributes	Label	Destination TPB Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3675	TPB TAZ Number
D_BMC_TAZ		
		Value
Standard Attributes	Label	Destination BMC Transportation Analysis Zone
	Type	Numeric
	Measurement	Nominal
Valid Values	1 to 3064	BMC TAZ10 Number
DEPARTURE_TIME_HHMM		
		Value
Standard Attributes	Label	Trip departure time
	Type	String
	Measurement	Scale
Valid Values	HH:MM	Departure time in hours and minutes
ARRIVAL_TIME_HHMM		
		Value
Standard Attributes	Label	Trip arrival time
	Type	String
	Measurement	Scale
Valid Values	HH:MM	Arrival time in hours and minutes
TRAVEL_MODE		
		Value
Standard Attributes	Label	Primary travel mode
	Type	String
	Measurement	Nominal
Valid Values	1	Walk
	2	Bike
	3	Motorcycle
	4	Auto (driver)
	5	Auto (passenger)
	6	School Bus
	7	Rail
	8	Bus
	9	Private Bus
	10	Paratransit
	11	Taxi / Private Car
	12	Uber/Lyft/Rideshare
	13	Air
	14	Water
	15	Other

MPO_TRAVEL_MODE		
		Value
Standard Attributes	Label	Primary travel mode
	Type	String
	Measurement	Nominal
Valid Values	P01	Drive Alone
	P02	Drive Others
	P03	Auto Passenger
	P04	Subway
	P05	Local_Bus
	P06	Commuter_Rail
	P07	Express_Commuter_Bus
	P08	Light_Rail
	P09	Shuttle_Bus
	P10	Paratransit
	P11	Ridehailing
	P12	Taxi
	P13	School_Bus
	P14	Walk
	P15	Bike
	P16	Intercity_Rail
	P17	Intercity_Bus
	P18	Air
	P19	Water
	P20	Other
	P21	Charter Bus
	P22	Motorcycle
Missing Values	-9	Not ascertained

MPO_TRAVEL_MODE_DETAIL		
		Value
Standard Attributes	Label	Combination of travel modes used on trip
	Type	String
	Measurement	Nominal
Valid Values	P01	Drive Alone
	P02	Drive Others
	P03	Auto Passenger
	P04	Subway
	P05	Local_Bus
	P06	Commuter_Rail
	P07	Express_Commuter_Bus
	P08	Light_Rail
	P09	Shuttle_Bus
	P10	Paratransit
	P11	Ridehailing
	P12	Taxi
	P13	School_Bus
	P14	Walk

	P15	Bike
	P16	Intercity_Rail
	P17	Intercity_Bus
	P18	Air
	P19	Water
	P20	Other
	P21	Charter Bus
	P22	Motorcycle
Missing Values	-9	Not ascertained

TRANSIT_ACCESS_MODE

		Value
Standard Attributes	Label	Travel mode used for transit access
	Type	String
	Measurement	Nominal
Valid Values	1	Walking
	2	Bicycle
	3	Park and ride
	4	Kiss and ride
	5	Taxi / Uber / Lyft
	6	Some other mode
Missing Values	-9	Not ascertained

MPO_TRANSIT_ACCESS_MODE

		Value
Standard Attributes	Label	Combination of travel modes used for transit access
	Type	String
	Measurement	Nominal
Valid Values	P01	Drive Alone
	P02	Drive Others
	P03	Auto Passenger
	P04	Subway
	P05	Local_Bus
	P06	Commuter_Rail
	P07	Express_Commuter_Bus
	P08	Light_Rail
	P09	Shuttle_Bus
	P10	Paratransit
	P11	Ridehailing
	P12	Taxi
	P13	School_Bus
	P14	Walk
	P15	Bike
	P16	Intercity_Rail
	P17	Intercity_Bus
	P18	Air
	P19	Water
	P20	Other
	P21	Charter Bus

	P22	Motorcycle
Missing Values	-9	Not ascertained

TRANSIT_EGRESS_MODE

		Value
Standard Attributes	Label	Travel mode used for transit egress
	Type	String
	Measurement	Nominal
Valid Values	1	Walking
	2	Bicycle
	3	Park and ride
	4	Kiss and ride
	5	Taxi / Uber / Lyft
	6	Some other mode
Missing Values	-9	Not ascertained

MPO_TRANSIT_EGRESS_MODE

		Value
Standard Attributes	Label	Combination of travel modes used for transit egress
	Type	String
	Measurement	Nominal
Valid Values	P01	Drive Alone
	P02	Drive Others
	P03	Auto Passenger
	P04	Subway
	P05	Local_Bus
	P06	Commuter_Rail
	P07	Express_Commuter_Bus
	P08	Light_Rail
	P09	Shuttle_Bus
	P10	Paratransit
	P11	Ridehailing
	P12	Taxi
	P13	School_Bus
	P14	Walk
	P15	Bike
	P16	Intercity_Rail
	P17	Intercity_Bus
	P18	Air
	P19	Water
	P20	Other
	P21	Charter Bus
	P22	Motorcycle
Missing Values	-9	Not ascertained

TRAVELERS_TOTAL

	Value
--	-------

Standard Attributes	Label	Total number of travelers on trip including self (derived)
	Type	Numeric
	Measurement	Nominal

TRAVELERS_HH

Value

Standard Attributes	Label	Household members on trip including self (derived)
	Type	Numeric
	Measurement	Nominal
Valid Values	1	1 household member
	8	8 or more household members

TRAVELERS_NONHH

Value

Standard Attributes	Label	Non-household members on trip
	Type	Numeric
	Measurement	Nominal

HHMEMBER1

Value

Standard Attributes	Label	Household member 1 was in the travel party
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not part of travel party
	1	Part of travel party

HHMEMBER2

Value

Standard Attributes	Label	Household member 2 was in the travel party
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not part of travel party
	1	Part of travel party

HHMEMBER3

Value

Standard Attributes	Label	Household member 3 was in the travel party
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not part of travel party
	1	Part of travel party

HHMEMBER4

Value

Standard Attributes	Label	Household member 4 was in the travel party
	Type	Numeric
	Measurement	Nominal

Valid Values	0	Not part of travel party
	1	Part of travel party

HHMEMBER5

		Value
Standard Attributes	Label	Household member 5 was in the travel party
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not part of travel party
	1	Part of travel party

HHMEMBER6

		Value
Standard Attributes	Label	Household member 6 was in the travel party
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not part of travel party
	1	Part of travel party

HHMEMBER7

		Value
Standard Attributes	Label	Household member 7 was in the travel party
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not part of travel party
	1	Part of travel party

HHMEMBER8

		Value
Standard Attributes	Label	Household member 8 was in the travel party
	Type	Numeric
	Measurement	Nominal
Valid Values	0	Not part of travel party
	1	Part of travel party

MODE_HH_VEHICLE

		Value
Standard Attributes	Label	Trip mode: Household vehicle
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Household Vehicle 1
	2	Household Vehicle 2
	3	Household Vehicle 3
	4	Household Vehicle 4
	5	Household Vehicle 5
	6	Household Vehicle 6
	7	Household Vehicle 7
	8	Household Vehicle 8
Missing Values	-9	Not ascertained

MPO_MODE_OTHER_VEHICLE

		Value
Standard Attributes	Label	Trip mode: Other car, truck, van
	Type	Numeric
	Measurement	Nominal
Valid Values	9	Rental vehicle
	10	Vehicle from work
	11	Someone else's vehicle
	12	Carshare vehicle
	13	Motorcycle/moped/scooter
	997	Other
Missing Values	-9	Not ascertained

VEHICLE_OCCUPANCY

		Value
Standard Attributes	Label	Vehicle occupancy
	Type	Numeric
	Measurement	Nominal

PARK_LOC

		Value
Standard Attributes	Label	Auto trip: If driver: Parking location at/near destination
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Driveway/garage
	2	Parking lot/garage
	3	On street parking
	4	Other
Missing Values	-9	Not ascertained

MPO_PARK_LOC

		Value
Standard Attributes	Label	Auto trip: If driver: Parking location at/near destination
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Own driveway/garage
	2	Someone else's driveway
	3	Parking lot/garage
	4	On street parking
	5	Park and ride lot
	6	Didn't park-waited
Missing Values	997	Other
	-9	Not ascertained

PARK_PAY

		Value
--	--	-------

Standard Attributes	Label	Auto trip: If driver: If paid for parking on travel date: If parking location was lot/garage, on-street, park/ride: Parking payment method
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

MPO_PARK_PAY

		Value
Standard Attributes	Label	Auto trip: If driver: If paid for parking on travel date: If parking location was lot/garage, on-street, park/ride: Parking payment method
	Type	Numeric
	Measurement	Nominal
Valid Values	1	No, parking was free
	2	No, employer paid
	3	No, paid by store, etc.
	4	Yes, cash, credit card, ticket
	5	Yes, SmarTrip or CharmCard
	997	Other
	998	Don't know
Missing Values	-9	Not ascertained

SUBWAY_USED

		Value
Standard Attributes	Label	Subway system used on trip
	Type	Numeric
	Measurement	Nominal
Valid Values	0	No
	1	Yes
Missing Values	-9	Not ascertained

SUBWAY_PAY

		Value
Standard Attributes	Label	Subway trip: Fare payment method
	Type	Numeric
	Measurement	Nominal
Valid Values	1	SmarTrip (regular fare)
	2	CharmCard (regular fare)
	3	Single trip fare
	4	Round trip fare
	5	Monthly pass
	6	Weekly pass
	7	Daily pass
	8	Transit Link Card
	9	Senior/disabled fare
	10	Youth/student fare

	997	Other
	998	Don't know
Missing Values	-9	Not ascertained

SUBWAY_STATION_BOARD

		Value
Standard Attributes	Label	Subway trip: If used Washington Metrorail or Baltimore Metro: Subway station where participant boarded
	Type	Numeric
	Measurement	Scale
Labeled Values	1	Addison Road
	2	Anacostia
	3	Archives
	4	Arlington Cemetery
	5	Ballston – MU
	6	Benning Road
	7	Bethesda
	8	Braddock Road
	9	Branch Avenue
	10	Brookland – CUA
	11	Capitol Heights
	12	Capitol South
	13	Cheverly
	14	Clarendon
	15	Cleveland Park
	16	College Park – University of Maryland
	17	Columbia Heights
	18	Congress Heights
	19	Court House
	20	Crystal City
	21	Deanwood
	22	Dunn Loring
	23	Dupont Circle
	24	East Falls Church
	25	Eastern Market
	26	Eisenhower Avenue
	27	Farragut North
	28	Farragut West
	29	Federal Center SW
	30	Federal Triangle
	31	Foggy Bottom – GWU
	32	Forest Glen
	35	Franconia – Springfield
	36	Friendship Heights
	39	Georgia Avenue – Petworth
	40	Glenmont
	41	Greensboro
	42	Greenbelt

43	Grosvenor – Strathmore
44	Huntington
45	Judiciary Square
46	King Street – Old Town
49	Landover
50	Largo Town Center
51	McLean
52	McPherson Square
53	Medical Center
56	Minnesota Avenue
57	Morgan Boulevard
58	Mount Vernon Square
59	Navy Yard – Ballpark
60	Naylor Road
61	New Carrollton
62	NoMa – Gallaudet U
63	Pentagon
64	Pentagon City
65	Potomac Avenue
66	Prince George's Plaza
67	Rhode Island Avenue – Brentwood
68	Rockville
69	Ronald Reagan Washington National Airport
70	Rosslyn
71	Shady Grove
72	Shaw – Howard University
73	Silver Spring
74	Smithsonian
75	Southern Avenue
76	Spring Hill
77	Stadium – Armory
78	Suitland
79	Takoma
80	Tenleytown – AU
81	Twinbrook
82	Tysons Corner
83	U Street
84	Union Station
85	Van Dorn Street
86	Van Ness – UDC
87	Vienna
88	Virginia Square – GMU
89	Waterfront
90	West Falls Church
91	West Hyattsville
92	Wheaton
93	White Flint
94	Wiehle – Reston East
95	Woodley Park

101	Owings Mills
102	Old Court
103	Milford Mill
104	Reisterstown Plaza
105	Rogers Avenue
106	West Coldspring
107	Mondawmin
108	Penn – North
109	Upton/Avenue Market
110	State Center/Cultural Center
111	Lexington Market
112	Charles Center
113	Shot Tower/Market Place
114	Johns Hopkins Hospital
133	Fort Totten
137	Gallery Place
147	L'Enfant Plaza
154	Metro Center
200	Aberdeen Station
201	Bowie State
202	Brunswick
203	BWI Airport Rail Station
204	Camden Station
205	Dorsey
206	Edgewood
207	Halethorpe
208	Harpers Ferry Station
209	Kensington
210	Martinsburg
211	Martin State Airport
212	Odenton
213	Pennsylvania Station
214	Point of Rocks
215	Riverdale
216	Savage
217	Washington Grove
218	West Baltimore
Missing Values	-9 Not ascertained

SUBWAY_ACCESS_MODE			Value
Standard Attributes	Label	Travel mode used for subway access	
	Type	String	
	Measurement	Nominal	
Valid Values	1	Walk	
	2	Bike	
	3	Auto (driver)	
	4	Auto (passenger)	
	5	Other	

Missing Values	-9	Not ascertained
----------------	----	-----------------

MPO_SUBWAY_ACCESS_MODE

		Value
Standard Attributes	Label	Combination of travel modes used for subway access
	Type	String
	Measurement	Nominal
Valid Values	P01	Drive Alone
	P02	Drive Others
	P03	Auto Passenger
	P04	Subway
	P05	Local_Bus
	P06	Commuter_Rail
	P07	Express_Commuter_Bus
	P08	Light_Rail
	P09	Shuttle_Bus
	P10	Paratransit
	P11	Ridehailing
	P12	Taxi
	P13	School_Bus
	P14	Walk
	P15	Bike
	P16	Intercity_Rail
	P17	Intercity_Bus
	P18	Air
	P19	Water
	P20	Other
	P21	Charter Bus
	P22	Motorcycle
Missing Values	-9	Not ascertained

SUBWAY_STATION_EXIT

		Value
Standard Attributes	Label	Subway trip: If used Washington Metrorail or Baltimore Metro: Subway station where participant exited
	Type	Numeric
	Measurement	Scale
Labeled Values	1	Addison Road
	2	Anacostia
	3	Archives
	4	Arlington Cemetery
	5	Ballston – MU
	6	Benning Road
	7	Bethesda
	8	Braddock Road
	9	Branch Avenue
	10	Brookland – CUA

11	Capitol Heights
12	Capitol South
13	Cheverly
14	Clarendon
15	Cleveland Park
16	College Park – University of Maryland
17	Columbia Heights
18	Congress Heights
19	Court House
20	Crystal City
21	Deanwood
22	Dunn Loring
23	Dupont Circle
24	East Falls Church
25	Eastern Market
26	Eisenhower Avenue
27	Farragut North
28	Farragut West
29	Federal Center SW
30	Federal Triangle
31	Foggy Bottom – GWU
32	Forest Glen
35	Franconia – Springfield
36	Friendship Heights
39	Georgia Avenue – Petworth
40	Glenmont
41	Greensboro
42	Greenbelt
43	Grosvenor – Strathmore
44	Huntington
45	Judiciary Square
46	King Street – Old Town
49	Landover
50	Largo Town Center
51	McLean
52	McPherson Square
53	Medical Center
56	Minnesota Avenue
57	Morgan Boulevard
58	Mount Vernon Square
59	Navy Yard – Ballpark
60	Naylor Road
61	New Carrollton
62	NoMa – Gallaudet U
63	Pentagon
64	Pentagon City
65	Potomac Avenue
66	Prince George's Plaza
67	Rhode Island Avenue – Brentwood

68	Rockville
69	Ronald Reagan Washington National Airport
70	Rosslyn
71	Shady Grove
72	Shaw – Howard University
73	Silver Spring
74	Smithsonian
75	Southern Avenue
76	Spring Hill
77	Stadium – Armory
78	Suitland
79	Takoma
80	Tenleytown – AU
81	Twinbrook
82	Tysons Corner
83	U Street
84	Union Station
85	Van Dorn Street
86	Van Ness – UDC
87	Vienna
88	Virginia Square – GMU
89	Waterfront
90	West Falls Church
91	West Hyattsville
92	Wheaton
93	White Flint
94	Wiehle – Reston East
95	Woodley Park
101	Owings Mills
102	Old Court
103	Milford Mill
104	Reisterstown Plaza
105	Rogers Avenue
106	West Coldspring
107	Mondawmin
108	Penn – North
109	Upton/Avenue Market
110	State Center/Cultural Center
111	Lexington Market
112	Charles Center
113	Shot Tower/Market Place
114	Johns Hopkins Hospital
133	Fort Totten
137	Gallery Place
147	L'Enfant Plaza
154	Metro Center
200	Aberdeen Station
201	Bowie State
202	Brunswick

	203	BWI Airport Rail Station
	204	Camden Station
	205	Dorsey
	206	Edgewood
	207	Halethorpe
	208	Harpers Ferry Station
	209	Kensington
	210	Martinsburg
	211	Martin State Airport
	212	Odenton
	213	Pennsylvania Station
	214	Point of Rocks
	215	Riverdale
	216	Savage
	217	Washington Grove
	218	West Baltimore
Missing Values	-9	Not ascertained

SUBWAY_EGRESS_MODE			Value
Standard Attributes	Label	Travel mode used for subway egress	
	Type	String	
	Measurement	Nominal	
Valid Values	1	Walk	
	2	Bike	
	3	Auto (driver)	
	4	Auto (passenger)	
	5	Other	
Missing Values	-9	Not ascertained	

MPO_SUBWAY_EGRESS_MODE			Value
Standard Attributes	Label	Combination of travel modes used for subway egress	
	Type	String	
	Measurement	Nominal	
Valid Values	P01	Drive Alone	
	P02	Drive Others	
	P03	Auto Passenger	
	P04	Subway	
	P05	Local_Bus	
	P06	Commuter_Rail	
	P07	Express_Commuter_Bus	
	P08	Light_Rail	
	P09	Shuttle_Bus	
	P10	Paratransit	
	P11	Ridehailing	
	P12	Taxi	
	P13	School_Bus	

	P14	Walk
	P15	Bike
	P16	Intercity_Rail
	P17	Intercity_Bus
	P18	Air
	P19	Water
	P20	Other
	P21	Charter Bus
	P22	Motorcycle
Missing Values	-9	Not ascertained

HOV_USED		
		Value
Standard Attributes	Label	Auto trip: HOV lane used on trip
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Yes
Missing Values	-9	Not ascertained

TOLL_ROAD_USED		
		Value
Standard Attributes	Label	Auto trip: HOT lane, toll road, toll bridge, or ferry used on trip
	Type	Numeric
	Measurement	Nominal
Valid Values	1	Yes
Missing Values	-9	Not ascertained

DISTANCE		
		Value
Standard Attributes	Label	Driving distance (miles) from origin to destination (Google estimate) (derived)
	Type	Numeric
	Measurement	Scale

REPORTED_TRAVEL_TIME		
		Value
Standard Attributes	Label	Trip duration: minutes (reported) (derived)
	Type	Numeric
	Measurement	Scale
Valid Values	HH:MM	Reported travel time in hours and minutes

WTTRDFIN		
		Value
Standard Attributes	Label	Weighing factor
	Type	Numeric
	Measurement	Scale

WWM_WTTRDFIN		
--------------	--	--

			Value
Standard Attributes	Label	Weighing factor adjusted for ACS Commuter Distribution and 2018 Metrorail Ridership Estimates	
	Type	Numeric	
	Measurement	Scale	

APPENDIX F - HOUSEHOLD FILE FREQUENCIES

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Data Summary

Number of Observations	18015
Sum of Weights	2690354.58

In TPB Modeled Area

IN_TPB	Record Count	Weighted Total	Percent of Total
No	35	7,717	0.3
Yes	17,980	2,682,638	99.7
Total	18,015	2,690,355	100.0

In BMC Modeled Area

IN_BMC	Record Count	Weighted Total	Percent of Total
No	7,923	1,196,970	44.5
Yes	10,092	1,493,384	55.5
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Home address: Area Type

AREA_TYPE	Record Count	Weighted Total	Percent of Total
Not in RTS Activity Center(TPB)	8,418	1,703,708	63.3
In RTS Activity Center(TPB)	5,373	543,261	20.2
In Shirlington RTS Activity Center(ARL)	92	6,616	0.2
In Columbia Pike RTS Activity Center(ARL)	351	17,134	0.6
In Rosslyn-Ballston RTS Activity Center(ARL)	340	12,624	0.5
In Pentagon-Crystal City RTS Activity Center(ARL)	370	28,099	1.0
In MTS Transit Targeted Area Type (BMC)	634	26,315	1.0
In MTS Other Targeted Area Type (BMC)	1,194	95,685	3.6
In MTS Low Density Targeted Area Type (BMC)	1,243	256,913	9.5
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Home address: State-County FIPS Code Combination

HOME_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
District of Columbia	2,086	308,656	11.5
Anne Arundel County, Maryland	1,623	206,508	7.7
Calvert County, Maryland	201	29,859	1.1
Carroll County, Maryland	570	59,603	2.2
Charles County, Maryland	410	57,483	2.1
Frederick County, Maryland	631	94,675	3.5
Howard County, Maryland	878	112,801	4.2
Montgomery County, Maryland	2,212	382,029	14.2
Prince George's County, Maryland	2,093	329,189	12.2
St. Mary's County, Maryland	221	38,494	1.4
Arlington County, Virginia	1,324	108,430	4.0
Clarke County, Virginia	68	5,728	0.2
Fairfax County, Virginia	2,123	405,242	15.1
Fauquier County, Virginia	199	25,504	0.9
King George County, Virginia	59	9,970	0.4
Loudoun County, Virginia	905	130,784	4.9
Prince William County, Virginia	821	148,059	5.5
Spotsylvania County, Virginia	193	46,495	1.7
Stafford County, Virginia	203	49,324	1.8
Alexandria city, Virginia	629	73,812	2.7
Fairfax city, Virginia	80	9,434	0.4
Falls Church city, Virginia	73	8,474	0.3
Fredericksburg city, Virginia	53	10,400	0.4
Manassas city, Virginia	179	13,802	0.5
Manassas Park city, Virginia	35	5,881	0.2
Jefferson County, West Virginia	146	19,718	0.7
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Household residence type of structure

HOME_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	6	607	0.0
Single-family house (detached)	8,920	1,497,016	55.6
Single-family house (attached)	3,578	484,581	18.0
Apartment/Condo	5,474	702,010	26.1
Mobile home/trailer	35	5,904	0.2
Dorm or institutional housing	2	236	0.0
Total	18,015	2,690,355	100.0

Household residence type of structure

MPO_HOME_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	3,071	378,913	14.1
Single-family house detached from any other house	7,081	1,245,002	46.3
Single-family attached house (rowhouse, duplex, townhouse)	2,952	424,375	15.8
Building with 2-9 apartments/condos	1,082	157,944	5.9
Building with 10-49 apartments/condos	1,303	197,661	7.3
Building with 50 or more apartments/condos	2,507	282,027	10.5
Mobile home/trailer	18	4,278	0.2
Dorm or institutional housing	1	155	0.0
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Household residence tenure status

HOME_OWNERSHIP	Record Count	Weighted Total	Percent of Total
Not ascertained	9	2,219	0.1
Own	12,934	1,976,445	73.5
Rent	4,812	666,242	24.8
Other	260	45,448	1.7
Total	18,015	2,690,355	100.0

Household residence tenure status

MPO_HOME_OWNERSHIP	Record Count	Weighted Total	Percent of Total
Not ascertained	3,071	378,913	14.1
Own/Buying (paying mortgage)	10,486	1,670,790	62.1
Rent	4,243	601,786	22.4
Provided by job or military	60	9,961	0.4
Provided by family, relative, or friend without payment of rent	124	24,840	0.9
Other	30	3,910	0.1
Prefer not to answer	1	155	0.0
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Number of household members

HHSIZE	Record Count	Weighted Total	Percent of Total
1 Household member	5,704	667,971	24.8
2 Household members	7,279	831,172	30.9
3 Household members	2,339	462,502	17.2
4 Household members	1,856	400,864	14.9
5 Household members	594	218,397	8.1
6 Household members	168	78,449	2.9
7 Household members	46	20,308	0.8
8 or more Household members	29	10,691	0.4
Total	18,015	2,690,355	100.0

Number of students in household

NUMSTUDENTS	Record Count	Weighted Total	Percent of Total
0 (no students)	12,851	1,579,909	58.7
1 student	2,770	485,670	18.1
2 students	1,707	380,681	14.1
3 students	515	175,499	6.5
4 students	131	53,382	2.0
5 students	30	10,478	0.4
6 students	10	4,351	0.2
8 or more students	1	386	0.0
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Number of household members with a license

NUMDRIVERS	Record Count	Weighted Total	Percent of Total
0 (no licensed drivers)	424	58,626	2.2
1	6,481	796,494	29.6
2 licensed drivers	9,491	1,435,978	53.4
3 licensed drivers	1,243	288,432	10.7
4 licensed drivers	311	87,488	3.3
5 licensed drivers	50	17,714	0.7
6 licensed drivers	12	4,647	0.2
7 licensed drivers	2	526	0.0
8 or more licensed drivers	1	451	0.0
Total	18,015	2,690,355	100.0

Number of workers in household

NUMWORKERS	Record Count	Weighted Total	Percent of Total
0 (no workers)	3,865	488,398	18.2
1 worker	7,115	977,860	36.3
2 workers	6,199	1,008,338	37.5
3 workers	681	169,501	6.3
4 workers	123	35,137	1.3
5 workers	25	8,809	0.3
6 workers	5	1,686	0.1
7 workers	1	175	0.0
8 or more workers	1	451	0.0
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Number of household members age 5+ with a disability or illness that affects ability to travel

NUMDISABILITIES	Record Count	Weighted Total	Percent of Total
0 (no persons with disabilities)	16,591	2,464,616	91.6
1 person with disabilities	1,296	201,844	7.5
2 persons with disabilities	121	22,468	0.8
3 persons with disabilities	5	874	0.0
4 persons with disabilities	2	552	0.0
Total	18,015	2,690,355	100.0

Number of household vehicles

NUMVEHICLE	Record Count	Weighted Total	Percent of Total
0 (no vehicles)	1,436	186,196	6.9
1 vehicle	6,694	844,719	31.4
2 vehicles	6,793	1,071,296	39.8
3 vehicles	2,167	399,005	14.8
4 vehicles	662	133,281	5.0
5 vehicles	182	37,727	1.4
6 vehicles	55	11,442	0.4
7 vehicles	13	3,470	0.1
8 or more vehicles	13	3,218	0.1
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Number of household vehicles with toll transponder

NUMVEHICLE_TRANSPONDER	Record Count	Weighted Total	Percent of Total
0 (no transponder)	7,398	1,050,771	39.1
1 transponder	5,735	804,386	29.9
2 transponders	3,995	662,276	24.6
3 transponders	752	145,605	5.4
4 transponders	110	22,186	0.8
5 transponders	17	3,217	0.1
6 transponders	5	888	0.0
7 transponders	2	639	0.0
8 or more transponders	1	386	0.0
Total	18,015	2,690,355	100.0

Number of household bicycles

NUMBICYCLE	Record Count	Weighted Total	Percent of Total
Not ascertained	2	69	0.0
0 (no bicycles)	9,839	1,385,255	51.5
1 bicycle	3,471	508,536	18.9
2 bicycles	3,268	529,980	19.7
3 bicycles	786	142,218	5.3
4 bicycles	409	74,464	2.8
5 or more bicycles	240	49,831	1.9
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Household income: Detailed categories

HH_INCOME_ DETAILED	Record Count	Weighted Total	Percent of Total
Less than \$15,000	557	81,793	3.0
\$15,000-\$24,999	507	73,208	2.7
\$25,000-\$34,999	617	86,653	3.2
\$35,000-\$49,999	1,179	171,125	6.4
\$50,000-\$74,999	2,536	346,644	12.9
\$75,000-\$99,999	2,834	404,322	15.0
\$100,000-\$149,999	4,547	667,837	24.8
\$150,000 or more	5,238	858,773	31.9
Total	18,015	2,690,355	100.0

Household income: Detailed categories

MPO_HH_INCOME_ DETAILED	Record Count	Weighted Total	Percent of Total
Not ascertained	3,071	378,913	14.1
Less than \$10,000	252	37,082	1.4
\$10,000-\$14,999	213	33,821	1.3
\$15,000-\$24,999	423	64,545	2.4
\$25,000-\$34,999	468	72,316	2.7
\$35,000-\$49,999	984	148,167	5.5
\$50,000-\$74,999	2,020	286,859	10.7
\$75,000-\$99,999	2,325	344,686	12.8
\$100,000-\$149,999	3,776	573,342	21.3
\$150,000-\$199,999	2,223	364,428	13.5
\$200,000 or more	2,260	386,196	14.4
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Household income: Broad categories

HH_INCOME_BROAD	Record Count	Weighted Total	Percent of Total
Less than \$50,000	2,860	412,779	15.3
\$50,000 or more	15,155	2,277,575	84.7
Total	18,015	2,690,355	100.0

Household income: Broad categories

MPO_HH_INCOME_ BROAD	Record Count	Weighted Total	Percent of Total
Not ascertained	3,071	378,913	14.1
Less than \$50,000	2,340	355,931	13.2
\$50,000 or more	12,604	1,955,511	72.7
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2017-10-10	16	2,832	0.1
2017-10-11	24	5,295	0.2
2017-10-12	30	4,763	0.2
2017-10-13	50	9,238	0.3
2017-10-16	104	17,833	0.7
2017-10-17	135	22,082	0.8
2017-10-18	114	17,635	0.7
2017-10-19	119	18,215	0.7
2017-10-20	93	14,843	0.6
2017-10-23	93	13,645	0.5
2017-10-24	80	11,240	0.4
2017-10-25	74	11,989	0.4
2017-10-26	72	12,128	0.5
2017-10-27	47	8,753	0.3
2017-10-30	83	15,473	0.6
2017-10-31	103	21,326	0.8
2017-11-01	83	14,762	0.5
2017-11-02	100	18,358	0.7
2017-11-03	121	21,417	0.8
2017-11-06	69	13,098	0.5
2017-11-07	71	12,390	0.5
2017-11-08	69	11,975	0.4
2017-11-09	77	12,934	0.5
2017-11-13	105	17,806	0.7
2017-11-14	99	20,020	0.7
2017-11-15	108	18,164	0.7
2017-11-16	115	20,479	0.8
2017-11-17	179	32,075	1.2
2017-11-20	93	14,813	0.6
2017-11-21	73	13,300	0.5
2017-11-22	82	12,630	0.5
2017-11-27	76	11,944	0.4
2017-11-28	80	14,108	0.5
2017-11-29	67	14,591	0.5
2017-11-30	142	23,203	0.9
2017-12-01	151	23,638	0.9
2017-12-04	98	16,525	0.6
2017-12-05	66	9,932	0.4
2017-12-06	67	12,308	0.5

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2017-12-07	72	12,609	0.5
2017-12-08	67	10,588	0.4
2017-12-11	88	14,720	0.5
2017-12-12	102	17,401	0.6
2017-12-13	92	15,043	0.6
2017-12-14	96	14,575	0.5
2017-12-15	89	17,210	0.6
2017-12-18	59	9,177	0.3
2017-12-19	61	9,912	0.4
2017-12-20	75	11,869	0.4
2017-12-21	68	10,956	0.4
2017-12-22	56	9,371	0.3
2018-01-02	156	25,576	1.0
2018-01-03	128	26,088	1.0
2018-01-04	106	18,750	0.7
2018-01-05	129	22,717	0.8
2018-01-08	149	25,886	1.0
2018-01-09	72	14,982	0.6
2018-01-10	84	14,547	0.5
2018-01-11	73	12,817	0.5
2018-01-12	73	12,638	0.5
2018-01-16	28	4,829	0.2
2018-01-17	32	6,503	0.2
2018-01-18	32	4,183	0.2
2018-01-19	47	7,623	0.3
2018-01-22	119	19,457	0.7
2018-01-23	93	14,861	0.6
2018-01-24	100	16,178	0.6
2018-01-25	106	15,932	0.6
2018-01-26	92	13,223	0.5
2018-01-29	45	8,179	0.3
2018-01-30	52	7,174	0.3
2018-01-31	58	8,866	0.3
2018-02-01	48	7,700	0.3
2018-02-02	64	9,880	0.4
2018-02-05	83	13,908	0.5
2018-02-06	70	9,421	0.4
2018-02-07	81	14,773	0.5
2018-02-08	104	15,679	0.6

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2018-02-09	96	16,806	0.6
2018-02-12	105	16,957	0.6
2018-02-13	98	16,512	0.6
2018-02-14	89	12,982	0.5
2018-02-15	81	12,548	0.5
2018-02-16	80	11,521	0.4
2018-02-20	85	13,196	0.5
2018-02-21	80	13,808	0.5
2018-02-22	83	12,855	0.5
2018-02-23	99	15,023	0.6
2018-02-26	165	23,715	0.9
2018-02-27	94	15,049	0.6
2018-02-28	96	13,819	0.5
2018-03-01	89	14,725	0.5
2018-03-02	89	13,793	0.5
2018-03-05	90	15,454	0.6
2018-03-06	87	13,697	0.5
2018-03-07	84	11,134	0.4
2018-03-08	80	14,168	0.5
2018-03-09	78	13,136	0.5
2018-03-12	58	8,178	0.3
2018-03-13	75	10,824	0.4
2018-03-14	73	10,181	0.4
2018-03-15	43	6,457	0.2
2018-03-16	51	6,933	0.3
2018-03-19	83	12,988	0.5
2018-03-20	80	13,087	0.5
2018-03-21	77	12,360	0.5
2018-03-22	74	12,690	0.5
2018-03-23	92	14,372	0.5
2018-03-26	66	9,369	0.3
2018-03-27	72	9,127	0.3
2018-03-28	61	9,220	0.3
2018-03-29	67	10,083	0.4
2018-03-30	66	9,580	0.4
2018-04-02	81	11,130	0.4
2018-04-03	90	14,034	0.5
2018-04-04	84	12,102	0.4
2018-04-05	86	10,906	0.4

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2018-04-06	82	11,699	0.4
2018-04-09	72	10,761	0.4
2018-04-10	52	8,286	0.3
2018-04-11	57	7,678	0.3
2018-04-12	50	7,564	0.3
2018-04-13	49	6,634	0.2
2018-04-16	47	7,665	0.3
2018-04-17	41	5,932	0.2
2018-04-18	26	3,387	0.1
2018-04-19	47	6,611	0.2
2018-04-20	56	8,010	0.3
2018-04-23	80	12,399	0.5
2018-04-24	79	10,912	0.4
2018-04-25	58	9,819	0.4
2018-04-26	93	13,507	0.5
2018-04-27	71	10,232	0.4
2018-04-30	84	12,224	0.5
2018-05-01	72	11,628	0.4
2018-05-02	87	13,576	0.5
2018-05-03	66	10,607	0.4
2018-05-04	58	7,496	0.3
2018-05-07	66	10,226	0.4
2018-05-08	67	10,537	0.4
2018-05-09	62	9,572	0.4
2018-05-10	63	8,495	0.3
2018-05-11	63	7,932	0.3
2018-05-14	76	11,103	0.4
2018-05-15	82	10,730	0.4
2018-05-16	71	9,367	0.3
2018-05-17	76	10,262	0.4
2018-05-18	83	11,159	0.4
2018-05-21	71	9,010	0.3
2018-05-22	81	10,791	0.4
2018-05-23	73	10,333	0.4
2018-05-24	60	8,456	0.3
2018-05-25	63	7,967	0.3
2018-05-29	63	9,035	0.3
2018-05-30	78	11,939	0.4
2018-05-31	81	10,602	0.4

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2018-06-01	62	8,834	0.3
2018-06-04	112	15,234	0.6
2018-06-05	57	10,155	0.4
2018-06-06	71	9,338	0.3
2018-06-07	53	6,907	0.3
2018-06-08	68	8,077	0.3
2018-06-11	53	8,044	0.3
2018-06-12	63	8,149	0.3
2018-06-13	47	7,238	0.3
2018-06-14	54	7,803	0.3
2018-06-15	71	10,629	0.4
2018-06-18	61	7,604	0.3
2018-06-19	67	12,318	0.5
2018-06-20	50	6,429	0.2
2018-06-21	38	5,996	0.2
2018-06-22	48	6,949	0.3
2018-06-25	37	4,582	0.2
2018-06-26	45	5,930	0.2
2018-06-27	29	3,814	0.1
2018-06-28	28	2,858	0.1
2018-06-29	35	5,971	0.2
2018-07-02	72	10,414	0.4
2018-07-03	51	7,722	0.3
2018-07-05	60	8,555	0.3
2018-07-06	54	8,230	0.3
2018-07-09	49	5,745	0.2
2018-07-10	31	4,599	0.2
2018-07-11	98	13,209	0.5
2018-07-12	34	4,701	0.2
2018-07-13	30	4,125	0.2
2018-07-16	42	5,912	0.2
2018-07-17	31	4,594	0.2
2018-07-18	46	5,730	0.2
2018-07-19	50	7,070	0.3
2018-07-20	66	9,394	0.3
2018-07-23	42	4,897	0.2
2018-07-24	38	5,743	0.2
2018-07-25	42	6,427	0.2
2018-07-26	39	5,421	0.2

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2018-07-27	50	8,481	0.3
2018-07-30	52	7,475	0.3
2018-07-31	65	8,796	0.3
2018-08-01	39	5,154	0.2
2018-08-02	36	4,435	0.2
2018-08-03	36	4,231	0.2
2018-08-06	31	4,984	0.2
2018-08-07	33	4,947	0.2
2018-08-08	28	3,507	0.1
2018-08-09	34	4,372	0.2
2018-08-10	38	4,916	0.2
2018-08-13	22	2,607	0.1
2018-08-14	19	2,157	0.1
2018-08-15	16	2,001	0.1
2018-08-16	22	2,990	0.1
2018-08-17	17	2,567	0.1
2018-08-20	20	2,849	0.1
2018-08-21	30	3,780	0.1
2018-08-22	20	2,584	0.1
2018-08-23	18	2,900	0.1
2018-08-24	26	3,348	0.1
2018-08-27	55	8,532	0.3
2018-08-28	26	3,216	0.1
2018-08-29	26	3,058	0.1
2018-08-30	37	4,496	0.2
2018-08-31	82	12,621	0.5
2018-09-04	23	2,126	0.1
2018-09-05	17	2,279	0.1
2018-09-06	11	1,573	0.1
2018-09-07	39	7,004	0.3
2018-09-10	108	16,475	0.6
2018-09-11	16	2,170	0.1
2018-09-12	16	1,631	0.1
2018-09-13	20	2,296	0.1
2018-09-14	63	11,535	0.4
2018-09-17	29	4,610	0.2
2018-09-18	55	7,307	0.3
2018-09-19	14	2,345	0.1
2018-09-20	61	10,556	0.4

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2018-09-21	21	3,300	0.1
2018-09-24	20	2,352	0.1
2018-09-25	35	5,157	0.2
2018-09-26	10	872	0.0
2018-09-27	44	6,724	0.2
2018-09-28	44	5,451	0.2
2018-10-01	52	6,761	0.3
2018-10-02	66	9,860	0.4
2018-10-03	55	6,627	0.2
2018-10-04	43	5,405	0.2
2018-10-05	23	2,665	0.1
2018-10-08	5	729	0.0
2018-10-09	30	3,991	0.1
2018-10-10	17	2,549	0.1
2018-10-11	13	1,338	0.0
2018-10-12	21	2,921	0.1
2018-10-15	47	6,206	0.2
2018-10-16	27	4,011	0.1
2018-10-17	57	7,953	0.3
2018-10-18	50	7,061	0.3
2018-10-19	54	7,040	0.3
2018-10-22	57	4,149	0.2
2018-10-23	57	4,198	0.2
2018-10-24	68	6,105	0.2
2018-10-25	80	7,369	0.3
2018-10-26	47	3,162	0.1
2018-10-29	50	3,514	0.1
2018-10-30	74	6,691	0.2
2018-10-31	66	6,963	0.3
2018-11-01	73	7,239	0.3
2018-11-02	49	2,996	0.1
2018-11-05	37	2,630	0.1
2018-11-06	26	1,874	0.1
2018-11-07	35	2,868	0.1
2018-11-08	22	1,940	0.1
2018-11-09	11	541	0.0
2018-11-12	9	1,004	0.0
2018-11-13	17	1,014	0.0
2018-11-14	15	1,437	0.1

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2018-11-15	17	1,834	0.1
2018-11-16	9	506	0.0
2018-11-19	19	1,582	0.1
2018-11-20	11	1,070	0.0
2018-11-21	3	233	0.0
2018-11-26	3	337	0.0
2018-11-27	11	1,083	0.0
2018-11-28	17	1,320	0.0
2018-11-29	13	1,365	0.1
2018-11-30	16	1,352	0.1
2018-12-03	14	1,097	0.0
2018-12-04	7	820	0.0
2018-12-05	6	595	0.0
2018-12-06	7	743	0.0
2018-12-07	7	369	0.0
2018-12-10	7	664	0.0
2018-12-11	11	1,086	0.0
2018-12-12	17	1,699	0.1
2018-12-13	12	1,163	0.0
2018-12-14	17	943	0.0
2018-12-17	11	781	0.0
2018-12-18	12	1,046	0.0
2018-12-19	13	1,047	0.0
2018-12-20	9	820	0.0
2018-12-21	12	1,600	0.1
2018-12-26	8	672	0.0
2018-12-27	5	564	0.0
2018-12-28	7	370	0.0
2019-01-02	6	770	0.0
2019-01-03	5	576	0.0
2019-01-04	8	582	0.0
2019-01-07	11	1,078	0.0
2019-01-08	14	1,380	0.1
2019-01-09	3	358	0.0
2019-01-10	6	483	0.0
2019-01-11	6	573	0.0
2019-01-14	5	587	0.0
2019-01-15	6	586	0.0
2019-01-16	8	826	0.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2019-01-17	6	556	0.0
2019-01-18	9	1,198	0.0
2019-01-21	5	361	0.0
2019-01-22	9	1,043	0.0
2019-01-23	5	341	0.0
2019-01-24	3	413	0.0
2019-01-25	5	312	0.0
2019-01-28	2	127	0.0
2019-01-29	3	377	0.0
2019-01-30	6	709	0.0
2019-01-31	4	594	0.0
2019-02-01	3	279	0.0
2019-02-04	2	79	0.0
2019-02-05	2	158	0.0
2019-02-06	4	223	0.0
2019-02-07	2	117	0.0
2019-02-08	3	294	0.0
2019-02-11	3	809	0.0
2019-02-12	5	362	0.0
2019-02-13	3	139	0.0
2019-02-14	4	428	0.0
2019-02-15	5	558	0.0
2019-02-18	5	276	0.0
2019-02-19	6	613	0.0
2019-02-20	4	385	0.0
2019-02-21	4	432	0.0
2019-02-22	2	194	0.0
2019-02-25	3	218	0.0
2019-02-26	3	274	0.0
2019-02-27	3	366	0.0
2019-02-28	3	388	0.0
2019-03-04	5	353	0.0
2019-03-05	2	308	0.0
2019-03-06	6	400	0.0
2019-03-07	4	398	0.0
2019-03-08	3	156	0.0
2019-03-11	4	491	0.0
2019-03-13	2	306	0.0
2019-03-14	6	358	0.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2019-03-15	1	115	0.0
2019-03-18	1	23	0.0
2019-03-20	1	100	0.0
2019-03-21	1	115	0.0
2019-03-22	2	66	0.0
2019-03-25	3	286	0.0
2019-03-26	1	151	0.0
2019-03-27	2	173	0.0
2019-03-28	1	36	0.0
2019-03-29	1	35	0.0
2019-04-01	1	21	0.0
2019-04-02	5	473	0.0
2019-04-03	6	349	0.0
2019-04-04	4	333	0.0
2019-04-05	3	278	0.0
2019-04-08	8	523	0.0
2019-04-09	5	318	0.0
2019-04-10	4	589	0.0
2019-04-11	3	183	0.0
2019-04-12	1	100	0.0
2019-04-15	3	408	0.0
2019-04-16	5	238	0.0
2019-04-17	4	373	0.0
2019-04-18	4	456	0.0
2019-04-19	13	1,608	0.1
2019-04-22	6	460	0.0
2019-04-23	5	409	0.0
2019-04-24	4	336	0.0
2019-04-25	9	786	0.0
2019-04-26	8	891	0.0
2019-04-29	6	498	0.0
2019-04-30	4	398	0.0
2019-05-01	4	372	0.0
2019-05-02	3	215	0.0
2019-05-03	3	319	0.0
2019-05-06	5	424	0.0
2019-05-07	2	237	0.0
2019-05-08	1	103	0.0
2019-05-09	1	154	0.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Assigned travel date (string)

TDATE_ STRING	Record Count	Weighted Total	Percent of Total
2019-05-13	4	209	0.0
2019-05-14	1	71	0.0
2019-05-16	2	63	0.0
2019-05-17	1	113	0.0
2019-05-20	1	13	0.0
2019-05-21	2	183	0.0
2019-05-22	3	412	0.0
2019-05-23	2	209	0.0
2019-05-24	2	100	0.0
2019-05-31	2	362	0.0
2019-06-05	1	267	0.0
2019-06-07	1	59	0.0
2019-06-26	1	240	0.0
Total	18,015	2,690,355	100.0

Pre-assigned travel day of week

TDATE_DOW	Record Count	Weighted Total	Percent of Total
Monday	3,607	532,658	19.8
Tuesday	3,689	557,955	20.7
Wednesday	3,521	528,314	19.6
Thursday	3,559	527,602	19.6
Friday	3,639	543,825	20.2
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Mailed packages were delivered to household on travel day (first person Age 18+ to answer Part 2 survey)

PACKAGE_ DELIVERED	Record Count	Weighted Total	Percent of Total
No	13,643	1,979,780	73.6
Yes	4,372	710,575	26.4
Total	18,015	2,690,355	100.0

Food was delivered to household on travel day (first person Age 18+ to answer Part 2 survey)

FOOD_ DELIVERED	Record Count	Weighted Total	Percent of Total
No	17,498	2,604,616	96.8
Yes	517	85,739	3.2
Total	18,015	2,690,355	100.0

Someone came to do work at household address on travel day (first person Age 18+ to answer Part 2 survey)

SERVICE_ DELIVERED	Record Count	Weighted Total	Percent of Total
No	17,022	2,529,583	94.0
Yes	993	160,771	6.0
Total	18,015	2,690,355	100.0

TPB Modeled Area
Household File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Home ownership - Imputation Flag

HOME_OWNERSHIP_ IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	1,906	226,403	8.4
FALSE	15,805	2,415,046	89.8
TRUE	304	48,905	1.8
Total	18,015	2,690,355	100.0

Household Income Detailed - Imputation Flag

HH_INCOME_ DETAILED_IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	1,771	203,617	7.6
FALSE	13,436	2,049,551	76.2
TRUE	2,808	437,187	16.3
Total	18,015	2,690,355	100.0

Number of household members age 5+ with a disability -Imputation Flag

NUMDISABILITIES_ IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	1,890	221,718	8.2
FALSE	15,705	2,400,049	89.2
TRUE	420	68,588	2.5
Total	18,015	2,690,355	100.0

APPENDIX G - PERSON FILE FREQUENCIES

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Data Summary

Number of Observations	39235
Sum of Weights	7111644.02

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Age			
AGE	Record Count	Weighted Total	Percent of Total
0	345	84,066	1.2
1	418	101,567	1.4
2	432	105,165	1.5
3	466	117,713	1.7
4	428	108,305	1.5
5	421	113,189	1.6
6	399	111,042	1.6
7	358	93,805	1.3
8	333	92,152	1.3
9	343	94,480	1.3
10	357	97,937	1.4
11	371	96,428	1.4
12	368	100,769	1.4
13	372	105,390	1.5
14	341	91,773	1.3
15	365	96,599	1.4
16	335	82,446	1.2
17	345	85,521	1.2
18	273	67,467	0.9
19	229	51,012	0.7
20	210	47,597	0.7
21	213	50,984	0.7
22	280	57,756	0.8
23	302	58,676	0.8
24	375	72,875	1.0
25	415	70,672	1.0
26	446	75,254	1.1
27	532	80,578	1.1
28	535	85,279	1.2
29	607	101,707	1.4
30	674	105,364	1.5
31	602	97,897	1.4
32	692	108,143	1.5
33	679	103,933	1.5
34	674	114,840	1.6
35	695	128,116	1.8
36	646	111,220	1.6
37	686	125,469	1.8
38	649	130,288	1.8

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Age			
AGE	Record Count	Weighted Total	Percent of Total
39	553	106,858	1.5
40	617	116,543	1.6
41	508	105,827	1.5
42	464	83,468	1.2
43	461	91,071	1.3
44	465	88,601	1.2
45	500	92,404	1.3
46	451	86,364	1.2
47	511	95,461	1.3
48	465	87,732	1.2
49	496	93,929	1.3
50	587	107,705	1.5
51	495	96,326	1.4
52	508	87,129	1.2
53	543	89,687	1.3
54	585	94,056	1.3
55	641	105,373	1.5
56	633	99,606	1.4
57	622	99,146	1.4
58	623	89,177	1.3
59	609	88,564	1.2
60	714	101,811	1.4
61	639	100,541	1.4
62	624	91,396	1.3
63	616	88,705	1.2
64	596	78,588	1.1
65	622	87,965	1.2
66	613	82,822	1.2
67	576	75,839	1.1
68	580	80,259	1.1
69	569	78,766	1.1
70	559	73,877	1.0
71	556	75,594	1.1
72	408	54,862	0.8
73	359	47,023	0.7
74	376	50,977	0.7
75	340	44,726	0.6
76	280	39,662	0.6
77	235	31,469	0.4

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Age

AGE	Record Count	Weighted Total	Percent of Total
78	220	28,463	0.4
79	179	23,068	0.3
80	168	21,218	0.3
81	130	17,353	0.2
82	99	11,709	0.2
83	103	14,798	0.2
84	104	13,807	0.2
85	72	9,597	0.1
86	58	8,821	0.1
87	59	10,070	0.1
88	47	8,366	0.1
89	29	3,765	0.1
90	35	7,525	0.1
91	31	4,447	0.1
92	30	5,576	0.1
93	17	2,756	0.0
94	15	1,934	0.0
95	10	1,829	0.0
96	7	715	0.0
97	3	1,073	0.0
98	2	141	0.0
99	7	1,232	0.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Age: Broad follow-up categories (all respondents)

AGE_GROUP	Record Count	Weighted Total	Percent of Total
Under 5 years old	2,089	516,815	7.3
5-11 years	2,582	699,034	9.8
12-13 years	740	206,159	2.9
14-15 years	706	188,371	2.6
16-17 years	680	167,966	2.4
18-24 years	1,882	406,366	5.7
25-34 years	5,856	943,666	13.3
35-44 years	5,744	1,087,462	15.3
45-54 years	5,141	930,794	13.1
55-64 years	6,317	942,907	13.3
65-74 years	5,218	707,983	10.0
75-84 years	1,858	246,273	3.5
85 years or older	422	67,847	1.0
Total	39,235	7,111,644	100.0

Gender

GENDER	Record Count	Weighted Total	Percent of Total
Not reported	6	1,647	0.0
Female	20,630	3,711,912	52.2
Male	18,599	3,398,084	47.8
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Race and ethnicity

RACEETHNICITY	Record Count	Weighted Total	Percent of Total
Not ascertained	274	56,974	0.8
Hispanic or Latino	1,946	448,294	6.3
African American or Black	5,546	1,026,460	14.4
Asian	3,296	671,264	9.4
White	26,776	4,623,754	65.0
Other/Two or more races	1,397	284,897	4.0
Total	39,235	7,111,644	100.0

Race and ethnicity

MPO_RACEETHNICITY	Record Count	Weighted Total	Percent of Total
Not ascertained	7,020	1,016,900	14.3
African American or Black	4,935	952,822	13.4
American Indian or Alaska Native	71	13,517	0.2
Asian	2,880	605,985	8.5
Hawaiian or Pacific Islander	71	13,589	0.2
White	21,455	3,860,568	54.3
Two or more races	965	214,152	3.0
Hispanic or Latino	1,823	432,254	6.1
Other	15	1,857	0.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Race and ethnicity

RACEETHNICITY_HISPANIC	Record Count	Weighted Total	Percent of Total
Not ascertained	299	77,460	1.1
Of Hispanic or Latino origin	2,108	476,879	6.7
Not of Hispanic or Latino origin	36,828	6,557,305	92.2
Total	39,235	7,111,644	100.0

Race and ethnicity

MPO_RACEETHNICITY_HISPANIC	Record Count	Weighted Total	Percent of Total
Not ascertained	7,020	1,016,900	14.3
Of Hispanic or Latino origin	1,823	432,254	6.1
Not of Hispanic or Latino origin	30,208	5,618,706	79.0
Not Specified	184	43,784	0.6
Total	39,235	7,111,644	100.0

Age 15+: Has valid drivers license

LICENSE	Record Count	Weighted Total	Percent of Total
Not ascertained	36	4,994	0.1
Yes	30,774	5,005,938	70.4
No	8,425	2,100,712	29.5
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Age 5+: Has disability or illness that affects ability to travel

DISABILITY	Record Count	Weighted Total	Percent of Total
Not reported	2,098	520,973	7.3
Yes	1,561	251,610	3.5
No	35,576	6,339,061	89.1
Total	39,235	7,111,644	100.0

Age 16+: Owns smartphone

SMARTPHONE	Record Count	Weighted Total	Percent of Total
Not ascertained	6,011	1,596,732	22.5
Yes	29,669	4,958,211	69.7
No	3,555	556,701	7.8
Total	39,235	7,111,644	100.0

Age 16+: Employment status

EMPLOYMENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	6,131	1,611,714	22.7
Worker, including self employed	22,012	3,665,064	51.5
Retired	6,602	898,590	12.6
Volunteer	1,340	293,274	4.1
Homemaker	232	39,585	0.6
Unemployed but looking for work	837	162,784	2.3
Unemployed, not seeking employment	214	34,832	0.5
Student (part-time or full-time)	1,288	304,215	4.3
Disabled non-worker	579	101,586	1.4
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Age 16+: Employment status

MPO_EMPLOYMENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	11,971	2,390,830	33.6
No	8,844	1,542,013	21.7
Yes, employed full or part time	18,241	3,146,078	44.2
Yes, unpaid family worker or intern	179	32,723	0.5
Total	39,235	7,111,644	100.0

Age 16+: Employment status: Unemployed: Unemployment status

MPO_UNEMPLOYMENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	30,392	5,569,786	78.3
Retired	5,275	750,843	10.6
Disabled or on disability status	477	87,899	1.2
Homemaker	1,120	254,857	3.6
Student	1,084	271,243	3.8
Not currently employed, but seeking employment	709	146,035	2.1
Leave of absence or not currently seeking employment	178	30,981	0.4
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Age 16+ employed (full-time/part-time, unpaid family worker, or intern): Number of jobs

JOB_COUNT	Record Count	Weighted Total	Percent of Total
Not ascertained	17,023	3,409,547	47.9
1 job	20,482	3,411,067	48.0
2 jobs	1,518	258,019	3.6
3 jobs	167	24,882	0.3
4 jobs	26	4,193	0.1
5 or more jobs	19	3,936	0.1
Total	39,235	7,111,644	100.0

Employed: Job 1: Employer's type of organization

MPO_J1_EMPLOYER_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	20,815	3,932,843	55.3
Work for private for-profit firm/company	8,008	1,430,479	20.1
Work for nonprofit firm/organization	2,787	457,063	6.4
Work for federal government	4,133	674,489	9.5
Work for state or local government	1,850	322,495	4.5
Work for international governmental agency or organization	199	31,410	0.4
Self employed	1,443	262,865	3.7
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: Usual work location

J1_WORKPLACE_LOC	Record Count	Weighted Total	Percent of Total
Not ascertained	17,024	3,409,637	47.9
Usually the same location (outside home)	17,454	2,905,679	40.9
Workplace regularly varies (different offices or jobsites)	2,341	400,398	5.6
At home (telecommute or self-employed with home office)	2,228	355,602	5.0
Drives for a living (e.g., bus driver, salesperson)	188	40,328	0.6
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

WORK address: State-County FIPS Code Combination

WORK_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	19,663	3,828,022	53.8
California	4	751	0.0
Delaware	3	608	0.0
District of Columbia	5,615	871,467	12.3
Florida	2	302	0.0
Georgia	1	244	0.0
Idaho	1	39	0.0
Illinois	1	137	0.0
Indiana	1	193	0.0
Allegany County, Maryland	1	73	0.0
Anne Arundel County, Maryland	1,123	172,004	2.4
Baltimore County, Maryland	307	45,201	0.6
Calvert County, Maryland	104	17,324	0.2
Carroll County, Maryland	234	30,341	0.4
Charles County, Maryland	204	34,355	0.5
Dorchester County, Maryland	1	193	0.0
Frederick County, Maryland	392	62,157	0.9
Harford County, Maryland	6	436	0.0
Howard County, Maryland	663	97,891	1.4
Kent County, Maryland	1	181	0.0
Montgomery County, Maryland	2,345	425,500	6.0
Prince George's County, Maryland	1,476	270,369	3.8
Queen Anne's County, Maryland	5	988	0.0
St. Mary's County, Maryland	257	46,326	0.7
Talbot County, Maryland	1	131	0.0
Washington County, Maryland	26	5,474	0.1
Worcester County, Maryland	1	81	0.0
Baltimore city, Maryland	342	52,720	0.7
Massachusetts	1	32	0.0
Michigan	2	238	0.0
Minnesota	1	179	0.0
Mississippi	2	138	0.0
Missouri	1	72	0.0
Nebraska	1	95	0.0
Nevada	1	307	0.0
New Jersey	1	106	0.0
New York	5	1,081	0.0
Ohio	2	287	0.0
Oregon	1	68	0.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

WORK address: State-County FIPS Code Combination

WORK_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Pennsylvania	20	2,983	0.0
Texas	1	78	0.0
Albemarle County, Virginia	2	528	0.0
Arlington County, Virginia	1,310	198,051	2.8
Caroline County, Virginia	6	1,677	0.0
Chesterfield County, Virginia	2	235	0.0
Clarke County, Virginia	15	1,876	0.0
Culpeper County, Virginia	4	858	0.0
Dinwiddie County, Virginia	1	277	0.0
Essex County, Virginia	1	1,005	0.0
Fairfax County, Virginia	2,712	501,686	7.1
Fauquier County, Virginia	87	12,554	0.2
Frederick County, Virginia	15	2,162	0.0
Hanover County, Virginia	1	454	0.0
Henrico County, Virginia	6	1,583	0.0
King George County, Virginia	71	15,423	0.2
Loudoun County, Virginia	621	105,523	1.5
Louisa County, Virginia	1	358	0.0
Montgomery County, Virginia	2	602	0.0
Orange County, Virginia	3	619	0.0
Prince Edward County, Virginia	1	300	0.0
Prince George County, Virginia	1	300	0.0
Prince William County, Virginia	404	80,298	1.1
Rappahannock County, Virginia	1	244	0.0
Southampton County, Virginia	1	200	0.0
Spotsylvania County, Virginia	92	25,242	0.4
Stafford County, Virginia	150	34,634	0.5
Warren County, Virginia	3	295	0.0
Alexandria city, Virginia	483	74,139	1.0
Fairfax city, Virginia	95	17,608	0.2
Falls Church city, Virginia	49	7,615	0.1
Fredericksburg city, Virginia	76	19,512	0.3
Lynchburg city, Virginia	1	616	0.0
Manassas city, Virginia	99	20,012	0.3
Manassas Park city, Virginia	20	4,013	0.1
Newport News city, Virginia	1	183	0.0
Richmond city, Virginia	5	1,127	0.0
Winchester city, Virginia	6	800	0.0
Washington	1	139	0.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

WORK address: State-County FIPS Code Combination

WORK_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
West Virginia	2	386	0.0
Berkeley County, West Virginia	16	2,370	0.0
Jefferson County, West Virginia	49	6,967	0.1
Total	39,235	7,111,644	100.0

Employed: Job 1: If travels to fixed or varied workplace:
 Usual number of weekday commutes per week

J1_COMMUTE_FREQ	Record Count	Weighted Total	Percent of Total
Not ascertained	21,058	3,964,188	55.7
5 weekdays a week	12,369	2,107,308	29.6
4 weekdays a week	2,495	426,960	6.0
3 weekdays a week	1,740	311,206	4.4
2 weekdays a week	727	138,722	2.0
1 weekday a week	229	47,524	0.7
Weekends only	84	19,010	0.3
Less than four weekdays per month	78	13,696	0.2
Schedule varies week-to-week	455	83,030	1.2
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If commutes: Usual way of commuting to primary workplace

J1_COMMUTE_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	3,595	543,923	7.6
Walk (or jog, wheelchair)	655	94,054	1.3
Bicycle	488	81,097	1.1
Drive alone or drive others	13,023	2,217,982	31.2
Auto passenger	1,095	212,197	3.0
Carpool	361	68,537	1.0
Bus transit	840	131,961	1.9
Rail transit	3,070	442,942	6.2
Transportation service (Taxi/Ride-Hail/Shuttle)	195	32,027	0.5
Other	15,913	3,286,923	46.2
Total	39,235	7,111,644	100.0

Employed: Job 1: If commutes: Usual way of commuting to primary workplace

MPO_J1_COMMUTE_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	22,693	4,262,646	59.9
Walk (or jog, wheelchair)	612	87,425	1.2
Bicycle	473	78,969	1.1
Drive alone in car, truck or van (if has a drivers license)	10,031	1,804,738	25.4
Drive/carpool with ONLY family/household member(s)	957	191,172	2.7
Carpool with at least one person NOT in household	323	62,146	0.9
Motorcycle/moped/scooter	59	10,336	0.1
Vanpool	64	12,275	0.2
Local bus	771	122,316	1.7
Subway (MetroRail, Baltimore Metro)	2,687	382,516	5.4
Commuter rail (e.g., MARC, VRE)	250	45,234	0.6
Streetcar/light rail	4	717	0.0
Shuttle bus	63	11,860	0.2
MetroAccess or Dial-A-Ride	27	4,697	0.1
Taxi or other ride-hailing service (e.g., Lyft, Uber)	117	17,907	0.3
Other	104	16,690	0.2
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If travels to fixed or varied workplace: Eligibility to telecommute

J1_TELECOMMUTE	Record Count	Weighted Total	Percent of Total
Not ascertained	19,095	3,774,468	53.1
Employer offers option	8,706	1,387,667	19.5
Employer does not offer option	11,434	1,949,509	27.4
Total	39,235	7,111,644	100.0

Employed: Job 1: If travels to fixed or varied workplace: Eligibility to telecommute

MPO_J1_TELECOMMUTE	Record Count	Weighted Total	Percent of Total
Not ascertained	22,693	4,262,646	59.9
Eligible to telecommute	5,856	961,275	13.5
Eligible, but choose not to telecommute	1,595	257,580	3.6
Not eligible to telecommute	9,091	1,630,143	22.9
Total	39,235	7,111,644	100.0

Employed: Job 1: If travels to fixed or varied workplace:
 Usual number of weekday telecommutes per week

J1_TELECOMMUTE_ DAYS	Record Count	Weighted Total	Percent of Total
Not ascertained	32,380	6,023,251	84.7
0 days	2,477	375,519	5.3
1 day	2,168	351,488	4.9
2 days	1,120	184,185	2.6
3 days	375	64,851	0.9
4 days	156	23,514	0.3
5+ days	559	88,837	1.2
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If travels to fixed or varied workplace:
Usual number of weekday telecommutes per week

MPO_J1_TELECOMMUTE_DAYS	Record Count	Weighted Total	Percent of Total
Not ascertained	33,379	6,150,369	86.5
Less than 4 weekdays per month	2,190	347,203	4.9
1 weekday a week	1,703	278,749	3.9
2 weekdays a week	934	158,410	2.2
3 weekdays a week	316	55,478	0.8
4 weekdays a week	124	19,726	0.3
5 weekdays a week	423	75,430	1.1
Weekends only	166	26,279	0.4
Total	39,235	7,111,644	100.0

Employed: Job 1: If usual work location is not home:
Transportation Benefits Offered: Free parking

J1_BENEFITS_ FREE_PARKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,883	3,729,836	52.4
No	8,990	1,466,739	20.6
Yes	11,362	1,915,069	26.9
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Subsidized/Pre-Tax benefit for parking

J1_BENEFITS_ PARKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,883	3,729,836	52.4
No	18,412	3,096,199	43.5
Yes	1,940	285,609	4.0
Total	39,235	7,111,644	100.0

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Subsidized/Pre-Tax benefit for transit use

J1_BENEFITS_ TRANSIT	Record Count	Weighted Total	Percent of Total
Not ascertained	18,909	3,732,900	52.5
No	14,828	2,562,756	36.0
Yes	5,498	815,989	11.5
Total	39,235	7,111,644	100.0

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Cash or other incentives for carpool and vanpool

J1_BENEFITS_ CARPOOL	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,729,162	52.4
No	19,569	3,261,114	45.9
Yes	791	121,368	1.7
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If usual work location is not home: Transportation Benefits
 Offered: Cash or other incentives for walking or biking to work

J1_BENEFITS_ WALKING_BIKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,729,162	52.4
No	19,858	3,307,555	46.5
Yes	502	74,927	1.1
Total	39,235	7,111,644	100.0

Employed: Job 1: If usual work location is not home: Transportation
 Benefits Offered: Electric vehicle charging station

J1_BENEFITS_ EV_CHARGING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,729,162	52.4
No	19,010	3,163,214	44.5
Yes	1,350	219,268	3.1
Total	39,235	7,111,644	100.0

Employed: Job 1: If usual work location is not home: Transportation
 Benefits Offered: Secure bicycle parking facility

J1_BENEFITS_ BICYCLE_PARKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,729,162	52.4
No	17,496	2,933,611	41.3
Yes	2,864	448,871	6.3
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If usual work location is not home: Transportation Benefits
 Offered: None, employer doesn't offer any transportation benefits

J1_BENEFITS_ NONE	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,729,162	52.4
No	17,141	2,827,375	39.8
Yes	3,219	555,107	7.8
Total	39,235	7,111,644	100.0

Student status: Child or adult (derived)

STUDENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	2	250	0.0
No, not a student	30,610	5,027,157	70.7
Yes, full-time or part-time student	8,623	2,084,237	29.3
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

If under age 18 or adult student: Type of school attended

SCHOOL_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	30,614	5,027,841	70.7
Daycare / Nursery / Pre-school	1,477	366,907	5.2
K - 8th grade	2,958	792,444	11.1
9th - 12th grade	1,371	350,909	4.9
Home school	319	101,105	1.4
Vocational/Technical school	103	16,944	0.2
2-year college (community college)	439	96,459	1.4
4-year college or university	759	160,307	2.3
Graduate/Professional school	953	149,237	2.1
Other	242	49,492	0.7
Total	39,235	7,111,644	100.0

If under age 18 or adult student: Type of school attended

MPO_SCHOOL_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	32,172	5,315,235	74.7
Daycare	500	114,787	1.6
Nanny/babysitter	188	44,404	0.6
Nursery School, Preschool	548	156,251	2.2
Kindergarten - Grade 8 (public or private)	2,395	675,919	9.5
Grade 9-12 (public or private)	1,120	307,120	4.3
Home school (K-12)	274	88,722	1.2
Technical/Vocational school	81	14,499	0.2
2 year college	333	81,817	1.2
4 year college or university	601	136,133	1.9
Graduate/Professional School	807	131,083	1.8
Other	216	45,674	0.6
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

SCHOOL address: State-County FIPS Code Combination

SCHOOL_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	31,818	5,297,997	74.5
Connecticut	1	345	0.0
Delaware	4	321	0.0
District of Columbia	847	177,475	2.5
Georgia	1	137	0.0
Illinois	1	128	0.0
Indiana	1	256	0.0
Iowa	1	195	0.0
Kentucky	1	59	0.0
Allegany County, Maryland	2	510	0.0
Anne Arundel County, Maryland	521	110,308	1.6
Baltimore County, Maryland	101	17,956	0.3
Calvert County, Maryland	77	16,420	0.2
Carroll County, Maryland	228	34,449	0.5
Charles County, Maryland	154	30,635	0.4
Frederick County, Maryland	273	65,489	0.9
Howard County, Maryland	390	78,574	1.1
Montgomery County, Maryland	917	272,880	3.8
Prince George's County, Maryland	820	203,521	2.9
Queen Anne's County, Maryland	2	859	0.0
St. Mary's County, Maryland	110	24,256	0.3
Somerset County, Maryland	5	759	0.0
Washington County, Maryland	3	1,148	0.0
Wicomico County, Maryland	6	1,263	0.0
Baltimore city, Maryland	57	10,561	0.1
Massachusetts	1	80	0.0
Michigan	4	750	0.0
Mississippi	2	107	0.0
Nebraska	1	76	0.0
New Jersey	1	104	0.0
New York	12	2,394	0.0
North Carolina	8	1,084	0.0
Ohio	5	849	0.0
Pennsylvania	22	4,146	0.1
South Carolina	2	494	0.0
Texas	1	344	0.0
Albemarle County, Virginia	2	167	0.0
Arlington County, Virginia	249	48,143	0.7
Chesterfield County, Virginia	1	516	0.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

SCHOOL address: State-County FIPS Code Combination

SCHOOL_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Clarke County, Virginia	15	1,933	0.0
Culpeper County, Virginia	1	311	0.0
Fairfax County, Virginia	979	304,577	4.3
Fauquier County, Virginia	87	16,055	0.2
Frederick County, Virginia	2	289	0.0
King George County, Virginia	33	7,995	0.1
Loudoun County, Virginia	489	100,557	1.4
Montgomery County, Virginia	6	1,701	0.0
Orange County, Virginia	3	1,110	0.0
Prince Edward County, Virginia	2	532	0.0
Prince William County, Virginia	360	113,193	1.6
Rappahannock County, Virginia	2	488	0.0
Richmond County, Virginia	1	118	0.0
Roanoke County, Virginia	1	275	0.0
Spotsylvania County, Virginia	69	25,434	0.4
Stafford County, Virginia	115	35,910	0.5
Alexandria city, Virginia	176	40,325	0.6
Charlottesville city, Virginia	2	618	0.0
Fairfax city, Virginia	28	5,670	0.1
Falls Church city, Virginia	34	6,485	0.1
Fredericksburg city, Virginia	27	6,999	0.1
Harrisonburg city, Virginia	6	1,895	0.0
Lexington city, Virginia	1	50	0.0
Lynchburg city, Virginia	3	501	0.0
Manassas city, Virginia	48	15,244	0.2
Manassas Park city, Virginia	12	2,814	0.0
Newport News city, Virginia	3	858	0.0
Norfolk city, Virginia	4	764	0.0
Radford city, Virginia	1	277	0.0
Richmond city, Virginia	12	2,843	0.0
Williamsburg city, Virginia	1	77	0.0
Winchester city, Virginia	4	560	0.0
Washington	1	354	0.0
Berkeley County, West Virginia	1	193	0.0
Jefferson County, West Virginia	52	8,457	0.1
Monongalia County, West Virginia	1	192	0.0
Wisconsin	1	235	0.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Student (adult or child): If school type is not homeschool,
nanny/babysitter: How often travels to school

SCHOOL_FREQ	Record Count	Weighted Total	Percent of Total
Not ascertained	31,891	5,276,055	74.2
5 weekdays a week	5,207	1,404,157	19.7
4 weekdays a week	300	64,179	0.9
3 weekdays a week	386	83,367	1.2
2 weekdays a week	417	87,787	1.2
1 weekday a week	224	44,880	0.6
Weekends only	61	13,515	0.2
Less than four weekdays per month	138	27,628	0.4
Never, only takes online classes (if age 5+)	611	110,076	1.5
Total	39,235	7,111,644	100.0

Student (adult or child): If school type is not homeschool, nanny/babysitter:
If does not take online-classes only: Travel mode to school

SCHOOL_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	31,815	5,297,266	74.5
Walk	701	165,577	2.3
Bicycle	113	27,647	0.4
POV - Driver	1,124	220,715	3.1
POV - Passenger	2,376	604,778	8.5
Carpool	228	60,292	0.8
Transit - Bus	211	54,516	0.8
Transit - Rail	213	37,347	0.5
Transportation service (Taxi/Rideshare/Shuttle)	66	13,221	0.2
School bus	2,262	607,684	8.5
Other	126	22,602	0.3
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Student (adult or child): If school type is not homeschool, nanny/babysitter:
 If does not take online-classes only: Travel mode to school

MPO_SCHOOL_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	33,178	5,549,483	78.0
Walk (or jog, wheelchair)	606	147,748	2.1
Bicycle	104	25,805	0.4
Drive alone in car, truck or van (if has a drivers license)	861	181,445	2.6
Drive/carpool with ONLY family/household member(s)	1,957	527,461	7.4
Carpool with at least one person NOT in household	196	53,683	0.8
Motorcycle/moped/scooter	9	1,115	0.0
Vanpool	11	2,390	0.0
School bus (if under age 25)	1,780	507,652	7.1
Local bus	195	51,486	0.7
Subway (MetroRail, Baltimore Metro)	201	35,038	0.5
Commuter rail (e.g., MARC, VRE)	8	1,493	0.0
Shuttle bus	25	6,198	0.1
MetroAccess or Dial-A-Ride	4	402	0.0
Taxi or other ride-hailing service (e.g., Lyft, Uber)	36	5,817	0.1
Other	64	14,428	0.2
Total	39,235	7,111,644	100.0

Age 16+: Volunteer status

VOLUNTEER_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	8,085	1,800,422	25.3
No, do not currently volunteer	23,219	3,985,292	56.0
Yes, currently volunteer	7,931	1,325,930	18.6
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Made trips on travel day

TRIPS_ YESNO	Record Count	Weighted Total	Percent of Total
Yes	32,944	5,898,008	82.9
No	6,291	1,213,636	17.1
Total	39,235	7,111,644	100.0

Primary reason did not make trips on travel day

NO_TRAVEL	Record Count	Weighted Total	Percent of Total
Not ascertained	32,949	5,898,460	82.9
Vacation / Personal day / Not scheduled to work	735	137,621	1.9
Personally sick or caretaking for others	586	123,159	1.7
Home-bound elderly or disabled	410	77,511	1.1
Worked at home for pay	666	107,168	1.5
Worked around home (not for pay)	1,301	223,403	3.1
Out of area	209	33,840	0.5
No transportation available	120	26,423	0.4
Other	2,259	484,057	6.8
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Primary reason did not make trips on travel day

MPO_NO_TRAVEL	Record Count	Weighted Total	Percent of Total
Not ascertained	33,985	6,047,094	85.0
Worked around home not for pay	1,099	196,258	2.8
Was waiting for visitor/delivery	54	9,312	0.1
Worked at home for pay	567	94,361	1.3
Not scheduled to work/took day off	547	111,039	1.6
Was sick or caring for another person	452	103,629	1.5
Home-bound elderly or disabled	334	67,780	1.0
Retired/Unemployed	64	11,624	0.2
Baby or child under 5 at home all day	210	57,521	0.8
Child 5 to 18 at home all day	496	136,463	1.9
No class or class online (college student/adult)	26	5,417	0.1
No transportation available	94	22,608	0.3
Inclement weather	102	23,188	0.3
Out of town	165	27,073	0.4
Away at college, school or camp	36	10,490	0.1
Visiting or staying with other relative	6	570	0.0
Hospitalized or incarcerated	7	1,245	0.0
No reason to go out/Resting at home	159	25,431	0.4
Unknown other reason	829	159,127	2.2
Prefer not to answer	3	1,414	0.0
Total	39,235	7,111,644	100.0

Travel Day: Age 16+: Made auto trips where parking was not free on travel day

TD_PAIDPARK	Record Count	Weighted Total	Percent of Total
Not ascertained	10,758	2,457,466	34.6
Yes	3,064	497,145	7.0
No	25,413	4,157,033	58.5
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Travel Day: Age 16+: Made auto trips using a HOV lane

TD_HOV	Record Count	Weighted Total	Percent of Total
Not ascertained	11,374	2,527,825	35.5
Yes	991	181,643	2.6
No	26,870	4,402,176	61.9
Total	39,235	7,111,644	100.0

Travel Day: Age 16+: Made auto trips using a HOT lane,
toll road, toll bridge or ferry on travel day

TD_TOLL	Record Count	Weighted Total	Percent of Total
Not ascertained	11,355	2,526,091	35.5
Yes	1,447	244,275	3.4
No	26,433	4,341,278	61.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent teleworking/telecommuting (hour increment)

TD_TELECOMMUTE_ TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	3,273	499,355	7.0
0 (no telecommute)	29,583	5,559,639	78.2
1 hour	1,045	177,550	2.5
2 hours	750	124,242	1.7
3 hours	347	55,126	0.8
4 hours	397	65,264	0.9
5 hours	269	48,390	0.7
6 hours	321	51,209	0.7
7 hours	317	50,747	0.7
8 or more hours	2,933	480,123	6.8
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent
 teleworking/telecommuting (nearest quarter hour)

MPO_TD_ TELECOMMUTE_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	20,902	3,954,943	55.6
0 (no telecommute)	12,767	2,211,491	31.1
15	223	35,123	0.5
30	264	45,181	0.6
45	106	17,165	0.2
60	457	82,954	1.2
75	54	9,070	0.1
90	159	24,536	0.3
105	28	5,224	0.1
120	421	73,957	1.0
135	15	3,016	0.0
150	64	10,435	0.1
165	14	2,436	0.0
180	196	33,276	0.5
195	10	947	0.0
210	39	6,155	0.1
225	11	2,456	0.0
240	258	43,732	0.6
255	25	3,684	0.1
270	51	9,991	0.1
285	12	1,734	0.0
300	158	29,853	0.4
315	11	2,180	0.0
330	34	5,775	0.1
345	5	1,006	0.0
360	226	37,817	0.5
375	20	2,827	0.0
390	39	5,994	0.1
405	18	2,405	0.0
420	178	30,634	0.4
435	19	3,438	0.0
450	98	14,141	0.2
465	26	3,991	0.1
480	1,092	184,610	2.6
495	67	10,832	0.2
510	226	41,046	0.6
525	31	5,421	0.1
540	406	67,821	1.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent
 teleworking/telecommuting (nearest quarter hour)

MPO_TD_ TELECOMMUTE_TIME	Record Count	Weighted Total	Percent of Total
555	29	4,106	0.1
570	87	12,033	0.2
585	18	2,942	0.0
600	185	31,383	0.4
615	10	1,775	0.0
630	29	6,044	0.1
645	5	683	0.0
660	39	6,604	0.1
675	4	798	0.0
690	12	1,455	0.0
705	1	71	0.0
720	47	7,863	0.1
735	5	663	0.0
750	5	898	0.0
780	4	549	0.0
795	1	136	0.0
810	2	931	0.0
840	8	1,172	0.0
855	1	164	0.0
870	1	309	0.0
900	1	53	0.0
960	1	82	0.0
1080	1	377	0.0
1200	2	900	0.0
1440	7	2,356	0.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Time spent shopping online (hour increment)

TD_SHOP_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	1,192	242,968	3.4
0 (no shopping online)	32,172	5,925,973	83.3
1 hour	5,097	823,813	11.6
2 hours	601	93,006	1.3
3 hours	98	13,377	0.2
4 hours	43	5,980	0.1
5 hours	9	1,553	0.0
6 hours	7	1,221	0.0
7 hours	2	675	0.0
8 or more hours	14	3,078	0.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Time spent shopping online (nearest quarter hour)

MPO_TD_SHOP_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	12,519	2,536,205	35.7
0 (no shopping online)	19,510	3,354,306	47.2
15	2,551	432,910	6.1
30	2,328	387,396	5.4
45	557	95,633	1.3
60	1,107	190,836	2.7
75	123	21,126	0.3
90	159	24,504	0.3
105	37	6,900	0.1
120	233	41,674	0.6
135	6	667	0.0
150	17	2,573	0.0
165	1	159	0.0
180	34	5,936	0.1
195	4	672	0.0
210	3	442	0.0
225	3	369	0.0
240	24	3,824	0.1
255	1	52	0.0
300	3	1,020	0.0
345	1	69	0.0
360	3	917	0.0
405	1	307	0.0
420	1	368	0.0
480	1	46	0.0
1440	8	2,733	0.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Number of trips made

PERSON_TRIPCOUNT	Record Count	Weighted Total	Percent of Total
0	6,291	1,213,636	17.1
1	517	92,008	1.3
2	11,290	2,172,935	30.6
3	5,139	895,306	12.6
4	6,261	1,090,555	15.3
5	3,383	567,613	8.0
6	2,686	450,602	6.3
7	1,522	255,584	3.6
8	986	170,451	2.4
9	484	80,559	1.1
10	298	49,364	0.7
11	180	34,240	0.5
12	96	19,333	0.3
13	43	8,044	0.1
14	25	4,476	0.1
15	17	3,208	0.0
16	7	1,320	0.0
17	1	231	0.0
18	2	869	0.0
19	1	113	0.0
20	1	502	0.0
23	3	566	0.0
24	1	74	0.0
25	1	53	0.0
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

Travel Day: Age 18+: Number of walk and bike loop trips

WALK_BIKE_ LOOP_TRIPS	Record Count	Weighted Total	Percent of Total
Not ascertained	9,395	2,016,350	28.4
0	22,417	3,920,932	55.1
1	4,844	784,654	11.0
2	1,740	263,602	3.7
3	515	77,979	1.1
4	290	42,259	0.6
5	20	2,500	0.0
6	5	819	0.0
7	3	233	0.0
8	6	2,316	0.0
Total	39,235	7,111,644	100.0

AGE - Imputation Flag

AGE_IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,327	598,611	8.4
FALSE	34,613	6,462,039	90.9
TRUE	295	50,995	0.7
Total	39,235	7,111,644	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WTPERFIN

The SURVEYFREQ Procedure

GENDER - Imputation Flag

GENDER_IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,367	605,031	8.5
FALSE	34,748	6,480,172	91.1
TRUE	120	26,441	0.4
Total	39,235	7,111,644	100.0

RACE/ETHNICITY - Imputation Flag

RACEETHNICITY_ IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,367	605,031	8.5
FALSE	31,416	5,835,769	82.1
TRUE	3,452	670,844	9.4
Total	39,235	7,111,644	100.0

RACE/ETHNICITY - Imputation Flag

MPO_RACEETHNICITY_ IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	7,020	1,016,900	14.3
FALSE	29,069	5,470,993	76.9
TRUE	3,146	623,751	8.8
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WTPERFIN

The SURVEYFREQ Procedure

DISABILITY - Imputation Flag

DISABILITY_IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,367	605,031	8.5
FALSE	34,287	6,409,130	90.1
TRUE	581	97,483	1.4
Total	39,235	7,111,644	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Data Summary

Number of Observations	39235
Sum of Weights	7123507

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Age

AGE	Record Count	Weighted Total	Percent of Total
0	345	85,687	1.2
1	418	103,393	1.5
2	432	107,244	1.5
3	466	120,052	1.7
4	428	110,690	1.6
5	421	114,723	1.6
6	399	114,058	1.6
7	358	95,783	1.3
8	333	93,793	1.3
9	343	95,667	1.3
10	357	99,073	1.4
11	371	97,804	1.4
12	368	102,002	1.4
13	372	107,083	1.5
14	341	92,421	1.3
15	365	97,339	1.4
16	335	83,029	1.2
17	345	88,845	1.2
18	273	69,227	1.0
19	229	53,008	0.7
20	210	49,000	0.7
21	213	51,825	0.7
22	280	59,751	0.8
23	302	59,285	0.8
24	375	72,354	1.0
25	415	73,064	1.0
26	446	74,966	1.1
27	532	83,264	1.2
28	535	85,363	1.2
29	607	99,945	1.4
30	674	106,975	1.5
31	602	98,180	1.4
32	692	106,805	1.5
33	679	102,648	1.4
34	674	113,969	1.6
35	695	126,600	1.8
36	646	108,345	1.5
37	686	123,847	1.7
38	649	124,939	1.8

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Age

AGE	Record Count	Weighted Total	Percent of Total
39	553	105,721	1.5
40	617	116,883	1.6
41	508	104,205	1.5
42	464	81,604	1.1
43	461	89,751	1.3
44	465	87,687	1.2
45	500	92,796	1.3
46	451	84,630	1.2
47	511	94,139	1.3
48	465	86,994	1.2
49	496	91,864	1.3
50	587	106,115	1.5
51	495	95,604	1.3
52	508	85,262	1.2
53	543	89,231	1.3
54	585	93,001	1.3
55	641	105,858	1.5
56	633	97,666	1.4
57	622	98,508	1.4
58	623	88,302	1.2
59	609	87,074	1.2
60	714	102,152	1.4
61	639	100,544	1.4
62	624	91,904	1.3
63	616	88,959	1.2
64	596	77,827	1.1
65	622	87,769	1.2
66	613	83,437	1.2
67	576	76,229	1.1
68	580	79,733	1.1
69	569	78,395	1.1
70	559	73,496	1.0
71	556	76,804	1.1
72	408	55,024	0.8
73	359	48,289	0.7
74	376	50,919	0.7
75	340	44,983	0.6
76	280	40,280	0.6
77	235	31,963	0.4

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Age

AGE	Record Count	Weighted Total	Percent of Total
78	220	28,603	0.4
79	179	23,379	0.3
80	168	21,234	0.3
81	130	17,486	0.2
82	99	11,876	0.2
83	103	14,845	0.2
84	104	14,020	0.2
85	72	9,631	0.1
86	58	9,027	0.1
87	59	10,228	0.1
88	47	8,445	0.1
89	29	3,726	0.1
90	35	7,555	0.1
91	31	4,472	0.1
92	30	5,586	0.1
93	17	2,774	0.0
94	15	1,937	0.0
95	10	1,851	0.0
96	7	720	0.0
97	3	1,078	0.0
98	2	141	0.0
99	7	1,245	0.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Age: Broad follow-up categories (all respondents)

AGE_GROUP	Record Count	Weighted Total	Percent of Total
Under 5 years old	2,089	527,066	7.4
5-11 years	2,582	710,901	10.0
12-13 years	740	209,085	2.9
14-15 years	706	189,760	2.7
16-17 years	680	171,874	2.4
18-24 years	1,882	414,450	5.8
25-34 years	5,856	945,179	13.3
35-44 years	5,744	1,069,582	15.0
45-54 years	5,141	919,636	12.9
55-64 years	6,317	938,794	13.2
65-74 years	5,218	710,095	10.0
75-84 years	1,858	248,669	3.5
85 years or older	422	68,416	1.0
Total	39,235	7,123,507	100.0

Gender

GENDER	Record Count	Weighted Total	Percent of Total
Not reported	6	1,648	0.0
Female	20,630	3,728,091	52.3
Male	18,599	3,393,768	47.6
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Race and ethnicity

RACEETHNICITY	Record Count	Weighted Total	Percent of Total
Not ascertained	274	56,417	0.8
Hispanic or Latino	1,946	453,635	6.4
African American or Black	5,546	1,022,455	14.4
Asian	3,296	677,247	9.5
White	26,776	4,627,686	65.0
Other/Two or more races	1,397	286,067	4.0
Total	39,235	7,123,507	100.0

Race and ethnicity

MPO_RACEETHNICITY	Record Count	Weighted Total	Percent of Total
Not ascertained	7,020	1,017,095	14.3
African American or Black	4,935	948,947	13.3
American Indian or Alaska Native	71	13,905	0.2
Asian	2,880	612,412	8.6
Hawaiian or Pacific Islander	71	14,268	0.2
White	21,455	3,863,098	54.2
Two or more races	965	214,154	3.0
Hispanic or Latino	1,823	437,707	6.1
Other	15	1,921	0.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Race and ethnicity

RACEETHNICITY_HISPANIC	Record Count	Weighted Total	Percent of Total
Not ascertained	299	77,095	1.1
Of Hispanic or Latino origin	2,108	481,753	6.8
Not of Hispanic or Latino origin	36,828	6,564,659	92.2
Total	39,235	7,123,507	100.0

Race and ethnicity

MPO_RACEETHNICITY_HISPANIC	Record Count	Weighted Total	Percent of Total
Not ascertained	7,020	1,017,095	14.3
Of Hispanic or Latino origin	1,823	437,707	6.1
Not of Hispanic or Latino origin	30,208	5,625,249	79.0
Not Specified	184	43,456	0.6
Total	39,235	7,123,507	100.0

Age 15+: Has valid drivers license

LICENSE	Record Count	Weighted Total	Percent of Total
Not ascertained	36	5,002	0.1
Yes	30,774	4,989,937	70.0
No	8,425	2,128,568	29.9
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Age 5+: Has disability or illness that affects ability to travel

DISABILITY	Record Count	Weighted Total	Percent of Total
Not reported	2,098	531,368	7.5
Yes	1,561	251,919	3.5
No	35,576	6,340,220	89.0
Total	39,235	7,123,507	100.0

Age 16+: Owns smartphone

SMARTPHONE	Record Count	Weighted Total	Percent of Total
Not ascertained	6,011	1,623,146	22.8
Yes	29,669	4,936,285	69.3
No	3,555	564,076	7.9
Total	39,235	7,123,507	100.0

Age 16+: Employment status

EMPLOYMENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	6,131	1,638,148	23.0
Worker, including self employed	22,012	3,641,445	51.1
Retired	6,602	904,462	12.7
Volunteer	1,340	295,265	4.1
Homemaker	232	39,619	0.6
Unemployed but looking for work	837	163,632	2.3
Unemployed, not seeking employment	214	35,265	0.5
Student (part-time or full-time)	1,288	303,617	4.3
Disabled non-worker	579	102,054	1.4
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WWM_WTPERFIN

The SURVEYFREQ Procedure

Age 16+: Employment status

MPO_EMPLOYMENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	11,971	2,417,184	33.9
No	8,844	1,551,189	21.8
Yes, employed full or part time	18,241	3,122,510	43.8
Yes, unpaid family worker or intern	179	32,624	0.5
Total	39,235	7,123,507	100.0

Age 16+: Employment status: Unemployed: Unemployment status

MPO_UNEMPLOYMENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	30,392	5,572,473	78.2
Retired	5,275	756,600	10.6
Disabled or on disability status	477	88,361	1.2
Homemaker	1,120	256,943	3.6
Student	1,084	270,853	3.8
Not currently employed, but seeking employment	709	146,866	2.1
Leave of absence or not currently seeking employment	178	31,411	0.4
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Age 16+ employed (full-time/part-time, unpaid family worker, or intern): Number of jobs

JOB_COUNT	Record Count	Weighted Total	Percent of Total
Not ascertained	17,023	3,445,127	48.4
1 job	20,482	3,385,362	47.5
2 jobs	1,518	259,068	3.6
3 jobs	167	25,692	0.4
4 jobs	26	4,401	0.1
5 or more jobs	19	3,857	0.1
Total	39,235	7,123,507	100.0

Employed: Job 1: Employer's type of organization

MPO_J1_EMPLOYER_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	20,815	3,968,373	55.7
Work for private for-profit firm/company	8,008	1,454,693	20.4
Work for nonprofit firm/organization	2,787	440,156	6.2
Work for federal government	4,133	621,148	8.7
Work for state or local government	1,850	342,645	4.8
Work for international governmental agency or organization	199	27,236	0.4
Self employed	1,443	269,256	3.8
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: Usual work location

J1_WORKPLACE_LOC	Record Count	Weighted Total	Percent of Total
Not ascertained	17,024	3,445,212	48.4
Usually the same location (outside home)	17,454	2,880,411	40.4
Workplace regularly varies (different offices or jobsites)	2,341	400,200	5.6
At home (telecommute or self-employed with home office)	2,228	356,183	5.0
Drives for a living (e.g., bus driver, salesperson)	188	41,501	0.6
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

WORK address: State-County FIPS Code Combination

WORK_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	19,663	3,864,988	54.3
California	4	823	0.0
Delaware	3	587	0.0
District of Columbia	5,615	738,097	10.4
Florida	2	431	0.0
Georgia	1	267	0.0
Idaho	1	39	0.0
Illinois	1	94	0.0
Indiana	1	193	0.0
Allegany County, Maryland	1	68	0.0
Anne Arundel County, Maryland	1,123	182,023	2.6
Baltimore County, Maryland	307	47,079	0.7
Calvert County, Maryland	104	18,383	0.3
Carroll County, Maryland	234	37,515	0.5
Charles County, Maryland	204	37,561	0.5
Dorchester County, Maryland	1	240	0.0
Frederick County, Maryland	392	75,720	1.1
Harford County, Maryland	6	421	0.0
Howard County, Maryland	663	96,145	1.3
Kent County, Maryland	1	217	0.0
Montgomery County, Maryland	2,345	427,357	6.0
Prince George's County, Maryland	1,476	274,931	3.9
Queen Anne's County, Maryland	5	1,050	0.0
St. Mary's County, Maryland	257	43,793	0.6
Talbot County, Maryland	1	396	0.0
Washington County, Maryland	26	5,426	0.1
Worcester County, Maryland	1	88	0.0
Baltimore city, Maryland	342	57,794	0.8
Massachusetts	1	32	0.0
Michigan	2	277	0.0
Minnesota	1	209	0.0
Mississippi	2	140	0.0
Missouri	1	392	0.0
Nebraska	1	95	0.0
Nevada	1	307	0.0
New Jersey	1	106	0.0
New York	5	1,127	0.0
Ohio	2	455	0.0
Oregon	1	176	0.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

WORK address: State-County FIPS Code Combination

WORK_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Pennsylvania	20	3,161	0.0
Texas	1	465	0.0
Albemarle County, Virginia	2	480	0.0
Arlington County, Virginia	1,310	154,350	2.2
Caroline County, Virginia	6	1,765	0.0
Chesterfield County, Virginia	2	199	0.0
Clarke County, Virginia	15	1,868	0.0
Culpeper County, Virginia	4	1,164	0.0
Dinwiddie County, Virginia	1	323	0.0
Essex County, Virginia	1	1,171	0.0
Fairfax County, Virginia	2,712	533,780	7.5
Fauquier County, Virginia	87	15,150	0.2
Frederick County, Virginia	15	2,386	0.0
Hanover County, Virginia	1	529	0.0
Henrico County, Virginia	6	1,753	0.0
King George County, Virginia	71	9,848	0.1
Loudoun County, Virginia	621	133,063	1.9
Louisa County, Virginia	1	358	0.0
Montgomery County, Virginia	2	671	0.0
Orange County, Virginia	3	787	0.0
Prince Edward County, Virginia	1	300	0.0
Prince George County, Virginia	1	408	0.0
Prince William County, Virginia	404	102,292	1.4
Rappahannock County, Virginia	1	168	0.0
Southampton County, Virginia	1	271	0.0
Spotsylvania County, Virginia	92	27,634	0.4
Stafford County, Virginia	150	34,702	0.5
Warren County, Virginia	3	223	0.0
Alexandria city, Virginia	483	83,128	1.2
Fairfax city, Virginia	95	18,918	0.3
Falls Church city, Virginia	49	8,414	0.1
Fredericksburg city, Virginia	76	23,295	0.3
Lynchburg city, Virginia	1	869	0.0
Manassas city, Virginia	99	25,031	0.4
Manassas Park city, Virginia	20	4,673	0.1
Newport News city, Virginia	1	183	0.0
Richmond city, Virginia	5	1,610	0.0
Winchester city, Virginia	6	1,386	0.0
Washington	1	108	0.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

WORK address: State-County FIPS Code Combination

WORK_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
West Virginia	2	371	0.0
Berkeley County, West Virginia	16	2,155	0.0
Jefferson County, West Virginia	49	9,055	0.1
Total	39,235	7,123,507	100.0

Employed: Job 1: If travels to fixed or varied workplace:
 Usual number of weekday commutes per week

J1_COMMUTE_FREQ	Record Count	Weighted Total	Percent of Total
Not ascertained	21,058	4,004,122	56.2
5 weekdays a week	12,369	2,080,680	29.2
4 weekdays a week	2,495	415,689	5.8
3 weekdays a week	1,740	310,935	4.4
2 weekdays a week	727	142,076	2.0
1 weekday a week	229	48,415	0.7
Weekends only	84	20,377	0.3
Less than four weekdays per month	78	14,243	0.2
Schedule varies week-to-week	455	86,970	1.2
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If commutes: Usual way of commuting to primary workplace

J1_COMMUTE_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	3,595	544,111	7.6
Walk (or jog, wheelchair)	655	94,755	1.3
Bicycle	488	79,810	1.1
Drive alone or drive others	13,023	2,281,176	32.0
Auto passenger	1,095	211,536	3.0
Carpool	361	60,179	0.8
Bus transit	840	122,472	1.7
Rail transit	3,070	376,744	5.3
Transportation service (Taxi/Ride-Hail/Shuttle)	195	31,177	0.4
Other	15,913	3,321,547	46.6
Total	39,235	7,123,507	100.0

Employed: Job 1: If commutes: Usual way of commuting to primary workplace

MPO_J1_COMMUTE_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	22,693	4,300,006	60.4
Walk (or jog, wheelchair)	612	87,456	1.2
Bicycle	473	77,524	1.1
Drive alone in car, truck or van (if has a drivers license)	10,031	1,865,194	26.2
Drive/carpool with ONLY family/household member(s)	957	189,797	2.7
Carpool with at least one person NOT in household	323	54,563	0.8
Motorcycle/moped/scooter	59	10,674	0.1
Vanpool	64	10,910	0.2
Local bus	771	113,820	1.6
Subway (MetroRail, Baltimore Metro)	2,687	327,943	4.6
Commuter rail (e.g., MARC, VRE)	250	36,260	0.5
Streetcar/light rail	4	787	0.0
Shuttle bus	63	11,226	0.2
MetroAccess or Dial-A-Ride	27	4,142	0.1
Taxi or other ride-hailing service (e.g., Lyft, Uber)	117	17,882	0.3
Other	104	15,323	0.2
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If travels to fixed or varied workplace: Eligibility to telecommute

J1_TELECOMMUTE	Record Count	Weighted Total	Percent of Total
Not ascertained	19,095	3,811,825	53.5
Employer offers option	8,706	1,322,244	18.6
Employer does not offer option	11,434	1,989,438	27.9
Total	39,235	7,123,507	100.0

Employed: Job 1: If travels to fixed or varied workplace: Eligibility to telecommute

MPO_J1_TELECOMMUTE	Record Count	Weighted Total	Percent of Total
Not ascertained	22,693	4,300,006	60.4
Eligible to telecommute	5,856	916,780	12.9
Eligible, but choose not to telecommute	1,595	246,247	3.5
Not eligible to telecommute	9,091	1,660,474	23.3
Total	39,235	7,123,507	100.0

Employed: Job 1: If travels to fixed or varied workplace:
Usual number of weekday telecommutes per week

J1_TELECOMMUTE_ DAYS	Record Count	Weighted Total	Percent of Total
Not ascertained	32,380	6,088,045	85.5
0 days	2,477	355,324	5.0
1 day	2,168	332,293	4.7
2 days	1,120	176,190	2.5
3 days	375	62,170	0.9
4 days	156	22,940	0.3
5+ days	559	86,545	1.2
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If travels to fixed or varied workplace:
 Usual number of weekday telecommutes per week

MPO_J1_TELECOMMUTE_DAYS	Record Count	Weighted Total	Percent of Total
Not ascertained	33,379	6,206,727	87.1
Less than 4 weekdays per month	2,190	327,275	4.6
1 weekday a week	1,703	264,307	3.7
2 weekdays a week	934	153,156	2.2
3 weekdays a week	316	53,706	0.8
4 weekdays a week	124	19,250	0.3
5 weekdays a week	423	73,131	1.0
Weekends only	166	25,955	0.4
Total	39,235	7,123,507	100.0

Employed: Job 1: If usual work location is not home:
 Transportation Benefits Offered: Free parking

J1_BENEFITS_ FREE_PARKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,883	3,766,105	52.9
No	8,990	1,379,849	19.4
Yes	11,362	1,977,553	27.8
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Subsidized/Pre-Tax benefit for parking

J1_BENEFITS_ PARKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,883	3,766,105	52.9
No	18,412	3,099,152	43.5
Yes	1,940	258,250	3.6
Total	39,235	7,123,507	100.0

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Subsidized/Pre-Tax benefit for transit use

J1_BENEFITS_ TRANSIT	Record Count	Weighted Total	Percent of Total
Not ascertained	18,909	3,769,274	52.9
No	14,828	2,630,854	36.9
Yes	5,498	723,379	10.2
Total	39,235	7,123,507	100.0

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Cash or other incentives for carpool and vanpool

J1_BENEFITS_ CARPOOL	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,765,418	52.9
No	19,569	3,243,744	45.5
Yes	791	114,345	1.6
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If usual work location is not home: Transportation Benefits
Offered: Cash or other incentives for walking or biking to work

J1_BENEFITS_ WALKING_BIKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,765,418	52.9
No	19,858	3,287,220	46.1
Yes	502	70,869	1.0
Total	39,235	7,123,507	100.0

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Electric vehicle charging station

J1_BENEFITS_ EV_CHARGING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,765,418	52.9
No	19,010	3,138,902	44.1
Yes	1,350	219,187	3.1
Total	39,235	7,123,507	100.0

Employed: Job 1: If usual work location is not home: Transportation
Benefits Offered: Secure bicycle parking facility

J1_BENEFITS_ BICYCLE_PARKING	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,765,418	52.9
No	17,496	2,932,608	41.2
Yes	2,864	425,481	6.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Employed: Job 1: If usual work location is not home: Transportation Benefits
 Offered: None, employer doesn't offer any transportation benefits

J1_BENEFITS_ NONE	Record Count	Weighted Total	Percent of Total
Not ascertained	18,875	3,765,418	52.9
No	17,141	2,800,075	39.3
Yes	3,219	558,014	7.8
Total	39,235	7,123,507	100.0

Student status: Child or adult (derived)

STUDENT_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	2	248	0.0
No, not a student	30,610	5,007,427	70.3
Yes, full-time or part-time student	8,623	2,115,832	29.7
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

If under age 18 or adult student: Type of school attended

SCHOOL_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	30,614	5,008,196	70.3
Daycare / Nursery / Pre-school	1,477	375,338	5.3
K - 8th grade	2,958	805,798	11.3
9th - 12th grade	1,371	357,583	5.0
Home school	319	102,460	1.4
Vocational/Technical school	103	16,215	0.2
2-year college (community college)	439	100,044	1.4
4-year college or university	759	162,703	2.3
Graduate/Professional school	953	146,764	2.1
Other	242	48,406	0.7
Total	39,235	7,123,507	100.0

If under age 18 or adult student: Type of school attended

MPO_SCHOOL_TYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	32,172	5,298,308	74.4
Daycare	500	117,977	1.7
Nanny/babysitter	188	45,478	0.6
Nursery School, Preschool	548	160,365	2.3
Kindergarten - Grade 8 (public or private)	2,395	689,135	9.7
Grade 9-12 (public or private)	1,120	313,172	4.4
Home school (K-12)	274	89,898	1.3
Technical/Vocational school	81	13,662	0.2
2 year college	333	84,724	1.2
4 year college or university	601	137,854	1.9
Graduate/Professional School	807	128,499	1.8
Other	216	44,435	0.6
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

SCHOOL address: State-County FIPS Code Combination

SCHOOL_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	31,818	5,280,715	74.1
Connecticut	1	345	0.0
Delaware	4	320	0.0
District of Columbia	847	177,652	2.5
Georgia	1	137	0.0
Illinois	1	128	0.0
Indiana	1	266	0.0
Iowa	1	195	0.0
Kentucky	1	59	0.0
Allegany County, Maryland	2	510	0.0
Anne Arundel County, Maryland	521	111,201	1.6
Baltimore County, Maryland	101	18,162	0.3
Calvert County, Maryland	77	16,450	0.2
Carroll County, Maryland	228	35,102	0.5
Charles County, Maryland	154	30,823	0.4
Frederick County, Maryland	273	66,601	0.9
Howard County, Maryland	390	78,947	1.1
Montgomery County, Maryland	917	281,062	3.9
Prince George's County, Maryland	820	206,859	2.9
Queen Anne's County, Maryland	2	872	0.0
St. Mary's County, Maryland	110	24,207	0.3
Somerset County, Maryland	5	754	0.0
Washington County, Maryland	3	1,137	0.0
Wicomico County, Maryland	6	1,295	0.0
Baltimore city, Maryland	57	11,005	0.2
Massachusetts	1	34	0.0
Michigan	4	810	0.0
Mississippi	2	106	0.0
Nebraska	1	83	0.0
New Jersey	1	108	0.0
New York	12	2,603	0.0
North Carolina	8	1,157	0.0
Ohio	5	978	0.0
Pennsylvania	22	4,185	0.1
South Carolina	2	512	0.0
Texas	1	356	0.0
Albemarle County, Virginia	2	200	0.0
Arlington County, Virginia	249	49,867	0.7
Chesterfield County, Virginia	1	516	0.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

SCHOOL address: State-County FIPS Code Combination

SCHOOL_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Clarke County, Virginia	15	1,940	0.0
Culpeper County, Virginia	1	348	0.0
Fairfax County, Virginia	979	309,033	4.3
Fauquier County, Virginia	87	16,314	0.2
Frederick County, Virginia	2	290	0.0
King George County, Virginia	33	7,913	0.1
Loudoun County, Virginia	489	102,460	1.4
Montgomery County, Virginia	6	1,687	0.0
Orange County, Virginia	3	1,202	0.0
Prince Edward County, Virginia	2	532	0.0
Prince William County, Virginia	360	115,127	1.6
Rappahannock County, Virginia	2	488	0.0
Richmond County, Virginia	1	69	0.0
Roanoke County, Virginia	1	277	0.0
Spotsylvania County, Virginia	69	25,636	0.4
Stafford County, Virginia	115	36,123	0.5
Alexandria city, Virginia	176	41,837	0.6
Charlottesville city, Virginia	2	618	0.0
Fairfax city, Virginia	28	5,744	0.1
Falls Church city, Virginia	34	6,577	0.1
Fredericksburg city, Virginia	27	7,263	0.1
Harrisonburg city, Virginia	6	1,987	0.0
Lexington city, Virginia	1	47	0.0
Lynchburg city, Virginia	3	502	0.0
Manassas city, Virginia	48	15,441	0.2
Manassas Park city, Virginia	12	2,837	0.0
Newport News city, Virginia	3	858	0.0
Norfolk city, Virginia	4	735	0.0
Radford city, Virginia	1	277	0.0
Richmond city, Virginia	12	2,876	0.0
Williamsburg city, Virginia	1	80	0.0
Winchester city, Virginia	4	565	0.0
Washington	1	354	0.0
Berkeley County, West Virginia	1	172	0.0
Jefferson County, West Virginia	52	8,524	0.1
Monongalia County, West Virginia	1	192	0.0
Wisconsin	1	263	0.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Student (adult or child): If school type is not homeschool,
 nanny/babysitter: How often travels to school

SCHOOL_FREQ	Record Count	Weighted Total	Percent of Total
Not ascertained	31,891	5,259,730	73.8
5 weekdays a week	5,207	1,429,877	20.1
4 weekdays a week	300	64,473	0.9
3 weekdays a week	386	84,212	1.2
2 weekdays a week	417	88,882	1.2
1 weekday a week	224	43,911	0.6
Weekends only	61	13,919	0.2
Less than four weekdays per month	138	28,559	0.4
Never, only takes online classes (if age 5+)	611	109,944	1.5
Total	39,235	7,123,507	100.0

Student (adult or child): If school type is not homeschool, nanny/babysitter:
 If does not take online-classes only: Travel mode to school

SCHOOL_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	31,815	5,279,983	74.1
Walk	701	171,550	2.4
Bicycle	113	28,459	0.4
POV - Driver	1,124	227,687	3.2
POV - Passenger	2,376	620,170	8.7
Carpool	228	61,547	0.9
Transit - Bus	211	56,370	0.8
Transit - Rail	213	26,333	0.4
Transportation service (Taxi/Rideshare/Shuttle)	66	13,593	0.2
School bus	2,262	615,031	8.6
Other	126	22,784	0.3
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Student (adult or child): If school type is not homeschool, nanny/babysitter:
 If does not take online-classes only: Travel mode to school

MPO_SCHOOL_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	33,178	5,534,285	77.7
Walk (or jog, wheelchair)	606	153,680	2.2
Bicycle	104	26,642	0.4
Drive alone in car, truck or van (if has a drivers license)	861	186,952	2.6
Drive/carpool with ONLY family/household member(s)	1,957	542,560	7.6
Carpool with at least one person NOT in household	196	54,927	0.8
Motorcycle/moped/scooter	9	1,232	0.0
Vanpool	11	2,428	0.0
School bus (if under age 25)	1,780	514,758	7.2
Local bus	195	53,311	0.7
Subway (MetroRail, Baltimore Metro)	201	24,330	0.3
Commuter rail (e.g., MARC, VRE)	8	1,432	0.0
Shuttle bus	25	6,437	0.1
MetroAccess or Dial-A-Ride	4	362	0.0
Taxi or other ride-hailing service (e.g., Lyft, Uber)	36	5,950	0.1
Other	64	14,221	0.2
Total	39,235	7,123,507	100.0

Age 16+: Volunteer status

VOLUNTEER_STATUS	Record Count	Weighted Total	Percent of Total
Not ascertained	8,085	1,829,443	25.7
No, do not currently volunteer	23,219	3,975,365	55.8
Yes, currently volunteer	7,931	1,318,699	18.5
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Made trips on travel day

TRIPS_ YESNO	Record Count	Weighted Total	Percent of Total
Yes	32,944	5,909,855	83.0
No	6,291	1,213,652	17.0
Total	39,235	7,123,507	100.0

Primary reason did not make trips on travel day

NO_TRAVEL	Record Count	Weighted Total	Percent of Total
Not ascertained	32,949	5,910,307	83.0
Vacation / Personal day / Not scheduled to work	735	137,623	1.9
Personally sick or caretaking for others	586	123,158	1.7
Home-bound elderly or disabled	410	77,520	1.1
Worked at home for pay	666	107,162	1.5
Worked around home (not for pay)	1,301	223,413	3.1
Out of area	209	33,842	0.5
No transportation available	120	26,420	0.4
Other	2,259	484,062	6.8
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Primary reason did not make trips on travel day

MPO_NO_TRAVEL	Record Count	Weighted Total	Percent of Total
Not ascertained	33,985	6,058,957	85.1
Worked around home not for pay	1,099	196,258	2.8
Was waiting for visitor/delivery	54	9,312	0.1
Worked at home for pay	567	94,361	1.3
Not scheduled to work/took day off	547	111,039	1.6
Was sick or caring for another person	452	103,629	1.5
Home-bound elderly or disabled	334	67,780	1.0
Retired/Unemployed	64	11,624	0.2
Baby or child under 5 at home all day	210	57,521	0.8
Child 5 to 18 at home all day	496	136,463	1.9
No class or class online (college student/adult)	26	5,417	0.1
No transportation available	94	22,608	0.3
Inclement weather	102	23,188	0.3
Out of town	165	27,073	0.4
Away at college, school or camp	36	10,490	0.1
Visiting or staying with other relative	6	570	0.0
Hospitalized or incarcerated	7	1,245	0.0
No reason to go out/Resting at home	159	25,431	0.4
Unknown other reason	829	159,127	2.2
Prefer not to answer	3	1,414	0.0
Total	39,235	7,123,507	100.0

Travel Day: Age 16+: Made auto trips where parking was not free on travel day

TD_PAIDPARK	Record Count	Weighted Total	Percent of Total
Not ascertained	10,758	2,483,404	34.9
Yes	3,064	460,939	6.5
No	25,413	4,179,164	58.7
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Travel Day: Age 16+: Made auto trips using a HOV lane

TD_HOV	Record Count	Weighted Total	Percent of Total
Not ascertained	11,374	2,554,178	35.9
Yes	991	160,066	2.2
No	26,870	4,409,263	61.9
Total	39,235	7,123,507	100.0

Travel Day: Age 16+: Made auto trips using a HOT lane,
toll road, toll bridge or ferry on travel day

TD_TOLL	Record Count	Weighted Total	Percent of Total
Not ascertained	11,355	2,552,328	35.8
Yes	1,447	235,802	3.3
No	26,433	4,335,377	60.9
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent teleworking/telecommuting (hour increment)

TD_TELECOMMUTE_ TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	3,273	500,121	7.0
0 (no telecommute)	29,583	5,584,564	78.4
1 hour	1,045	175,929	2.5
2 hours	750	122,307	1.7
3 hours	347	54,361	0.8
4 hours	397	65,776	0.9
5 hours	269	47,795	0.7
6 hours	321	51,089	0.7
7 hours	317	49,595	0.7
8 or more hours	2,933	471,970	6.6
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent
 teleworking/telecommuting (nearest quarter hour)

MPO_TD_ TELECOMMUTE_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	20,902	3,992,904	56.1
0 (no telecommute)	12,767	2,197,036	30.8
15	223	34,924	0.5
30	264	44,768	0.6
45	106	17,913	0.3
60	457	81,088	1.1
75	54	9,146	0.1
90	159	23,290	0.3
105	28	4,985	0.1
120	421	73,805	1.0
135	15	3,123	0.0
150	64	9,959	0.1
165	14	2,445	0.0
180	196	32,821	0.5
195	10	1,010	0.0
210	39	5,821	0.1
225	11	2,600	0.0
240	258	44,054	0.6
255	25	4,279	0.1
270	51	10,048	0.1
285	12	1,763	0.0
300	158	29,158	0.4
315	11	2,157	0.0
330	34	6,221	0.1
345	5	1,058	0.0
360	226	37,175	0.5
375	20	2,727	0.0
390	39	5,878	0.1
405	18	2,160	0.0
420	178	29,999	0.4
435	19	3,531	0.0
450	98	14,100	0.2
465	26	3,707	0.1
480	1,092	180,446	2.5
495	67	10,167	0.1
510	226	39,806	0.6
525	31	5,478	0.1
540	406	67,215	0.9

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Has 1+ Jobs: Time spent
 teleworking/telecommuting (nearest quarter hour)

MPO_TD_ TELECOMMUTE_TIME	Record Count	Weighted Total	Percent of Total
555	29	3,820	0.1
570	87	11,556	0.2
585	18	2,801	0.0
600	185	31,510	0.4
615	10	1,873	0.0
630	29	6,011	0.1
645	5	682	0.0
660	39	6,667	0.1
675	4	797	0.0
690	12	1,696	0.0
705	1	68	0.0
720	47	8,161	0.1
735	5	708	0.0
750	5	914	0.0
780	4	308	0.0
795	1	94	0.0
810	2	1,103	0.0
840	8	1,711	0.0
855	1	183	0.0
870	1	249	0.0
900	1	55	0.0
960	1	66	0.0
1080	1	377	0.0
1200	2	976	0.0
1440	7	2,356	0.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WWM_WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Time spent shopping online (hour increment)

TD_SHOP_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	1,192	243,722	3.4
0 (no shopping online)	32,172	5,937,847	83.4
1 hour	5,097	823,360	11.6
2 hours	601	92,172	1.3
3 hours	98	13,671	0.2
4 hours	43	6,310	0.1
5 hours	9	1,494	0.0
6 hours	7	1,302	0.0
7 hours	2	557	0.0
8 or more hours	14	3,072	0.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Travel Day Time Use: Age 18+: Time spent shopping online (nearest quarter hour)

MPO_TD_SHOP_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	12,519	2,565,765	36.0
0 (no shopping online)	19,510	3,339,378	46.9
15	2,551	430,445	6.0
30	2,328	386,983	5.4
45	557	96,090	1.3
60	1,107	189,862	2.7
75	123	21,782	0.3
90	159	23,883	0.3
105	37	7,001	0.1
120	233	41,557	0.6
135	6	684	0.0
150	17	2,618	0.0
165	1	157	0.0
180	34	6,046	0.1
195	4	673	0.0
210	3	441	0.0
225	3	372	0.0
240	24	4,156	0.1
255	1	67	0.0
300	3	1,083	0.0
345	1	60	0.0
360	3	1,015	0.0
405	1	189	0.0
420	1	368	0.0
480	1	51	0.0
1440	8	2,781	0.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Number of trips made

PERSON_TRIPCOUNT	Record Count	Weighted Total	Percent of Total
0	6,291	1,213,652	17.0
1	517	92,482	1.3
2	11,290	2,191,333	30.8
3	5,139	896,346	12.6
4	6,261	1,088,487	15.3
5	3,383	564,656	7.9
6	2,686	446,790	6.3
7	1,522	252,792	3.5
8	986	170,384	2.4
9	484	80,972	1.1
10	298	51,524	0.7
11	180	34,764	0.5
12	96	19,249	0.3
13	43	8,203	0.1
14	25	4,772	0.1
15	17	3,180	0.0
16	7	1,400	0.0
17	1	225	0.0
18	2	933	0.0
19	1	126	0.0
20	1	521	0.0
23	3	579	0.0
24	1	77	0.0
25	1	60	0.0
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

Travel Day: Age 18+: Number of walk and bike loop trips

WALK_BIKE_ LOOP_TRIPS	Record Count	Weighted Total	Percent of Total
Not ascertained	9,395	2,048,444	28.8
0	22,417	3,899,957	54.7
1	4,844	785,083	11.0
2	1,740	263,032	3.7
3	515	78,031	1.1
4	290	42,930	0.6
5	20	2,666	0.0
6	5	827	0.0
7	3	221	0.0
8	6	2,316	0.0
Total	39,235	7,123,507	100.0

AGE - Imputation Flag

AGE_IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,327	600,760	8.4
FALSE	34,613	6,470,384	90.8
TRUE	295	52,363	0.7
Total	39,235	7,123,507	100.0

TPB Modeled Area
 Person File Tabulations
 Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

GENDER - Imputation Flag

GENDER_IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,367	607,344	8.5
FALSE	34,748	6,489,186	91.1
TRUE	120	26,977	0.4
Total	39,235	7,123,507	100.0

RACE/ETHNICITY - Imputation Flag

RACEETHNICITY_ IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,367	607,344	8.5
FALSE	31,416	5,841,940	82.0
TRUE	3,452	674,223	9.5
Total	39,235	7,123,507	100.0

RACE/ETHNICITY - Imputation Flag

MPO_RACEETHNICITY_ IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	7,020	1,017,095	14.3
FALSE	29,069	5,478,911	76.9
TRUE	3,146	627,501	8.8
Total	39,235	7,123,507	100.0

TPB Modeled Area
Person File Tabulations
Weighted with WMM_WTPERFIN

The SURVEYFREQ Procedure

DISABILITY - Imputation Flag

DISABILITY_IMP	Record Count	Weighted Total	Percent of Total
Not ascertained	4,367	607,344	8.5
FALSE	34,287	6,418,330	90.1
TRUE	581	97,833	1.4
Total	39,235	7,123,507	100.0

APPENDIX H - VEHICLE FILE FREQUENCIES

TPB Modeled Area
Vehicle File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Data Summary

Number of Observations	30868
Sum of Weights	5024947.11

Vehicle Number

VEHNUM	Record Count	Weighted Total	Percent of Total
1	16,578	2,504,067	49.8
2	9,884	1,659,348	33.0
3	3,092	588,143	11.7
4	924	189,061	3.8
5	263	55,857	1.1
6	82	18,207	0.4
7	26	6,688	0.1
8	19	3,576	0.1
Total	30,868	5,024,947	100.0

TPB Modeled Area
Vehicle File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Year (1980 is earliest year for RTS Households)

YEAR	Record Count	Weighted Total	Percent of Total
Not ascertained	21	1,684	0.0
1935	1	81	0.0
1950	1	25	0.0
1956	2	135	0.0
1962	1	100	0.0
1964	1	119	0.0
1965	2	168	0.0
1967	3	321	0.0
1968	3	201	0.0
1969	3	247	0.0
1970	2	120	0.0
1971	4	283	0.0
1972	6	432	0.0
1973	2	70	0.0
1974	2	372	0.0
1975	4	312	0.0
1976	2	80	0.0
1977	1	32	0.0
1978	4	283	0.0
1979	3	332	0.0
1980	184	31,239	0.6
1981	5	675	0.0
1982	7	1,224	0.0
1983	8	1,510	0.0
1984	19	2,546	0.1
1985	24	3,643	0.1
1986	35	5,124	0.1
1987	37	6,954	0.1
1988	42	5,817	0.1
1989	31	3,892	0.1
1990	46	6,159	0.1
1991	64	8,914	0.2
1992	70	12,797	0.3
1993	85	13,306	0.3
1994	89	14,728	0.3
1995	162	26,663	0.5
1996	175	31,722	0.6
1997	234	38,271	0.8
1998	336	54,530	1.1

TPB Modeled Area
Vehicle File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Year (1980 is earliest year for RTS Households)

YEAR	Record Count	Weighted Total	Percent of Total
1999	396	64,264	1.3
2000	557	89,261	1.8
2001	617	105,386	2.1
2002	759	129,795	2.6
2003	971	156,200	3.1
2004	1,177	198,225	3.9
2005	1,312	216,190	4.3
2006	1,329	221,855	4.4
2007	1,552	263,228	5.2
2008	1,533	241,026	4.8
2009	1,322	215,240	4.3
2010	1,759	287,887	5.7
2011	1,733	280,877	5.6
2012	2,036	345,636	6.9
2013	2,193	358,157	7.1
2014	2,222	361,329	7.2
2015	2,373	390,030	7.8
2016	2,313	361,449	7.2
2017	2,112	337,617	6.7
2018	844	122,244	2.4
2019	37	3,943	0.1
Total	30,868	5,024,947	100.0

TPB Modeled Area
Vehicle File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Body type

BODYTYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	10	1,526	0.0
Car (or station wagon)	16,854	2,626,928	52.3
Van (any type)	1,721	381,694	7.6
SUV	9,092	1,510,001	30.1
Pickup Truck	2,437	395,531	7.9
Other type of truck	57	7,715	0.2
RV	80	12,051	0.2
Motorcycle	607	86,168	1.7
Other	10	3,333	0.1
Total	30,868	5,024,947	100.0

Vehicle fuel type

FUELTYPE	Record Count	Weighted Total	Percent of Total
Not ascertained	10	1,013	0.0
Gas	28,404	4,623,799	92.0
Diesel	425	68,673	1.4
Plug-in Hybrid	135	24,144	0.5
Hybrid	1,610	257,011	5.1
Electric	107	17,181	0.3
Flex Fuel	170	31,952	0.6
Other	7	1,173	0.0
Total	30,868	5,024,947	100.0

TPB Modeled Area
Vehicle File Tabulations
Weighted with WTHHFIN

The SURVEYFREQ Procedure

Vehicle toll transponder

TOLLTRANSPONDER	Record Count	Weighted Total	Percent of Total
Not ascertained	8	755	0.0
Yes	16,556	2,683,291	53.4
No	14,304	2,340,901	46.6
Total	30,868	5,024,947	100.0

Vehicle toll transponder

MPO_TOLLTRANSPONDER	Record Count	Weighted Total	Percent of Total
Not ascertained	6,245	823,301	16.4
Yes, E-ZPass	10,786	1,729,569	34.4
Yes, E-ZPass Flex	2,541	509,700	10.1
Yes, other transponder (not E-ZPass)	122	20,154	0.4
No	11,174	1,942,223	38.7
Total	30,868	5,024,947	100.0

APPENDIX I - TRIP FILE FREQUENCIES

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Data Summary

Number of Observations 126874
 Sum of Weights 22269641.2

Trip number

TRIPNO	Record Count	Weighted Total	Percent of Total
01	32,549	5,840,078	26.2
02	30,902	5,546,260	24.9
03	20,970	3,617,635	16.2
04	16,020	2,736,511	12.3
05	10,077	1,713,691	7.7
06	6,748	1,148,567	5.2
07	3,992	682,174	3.1
08	2,387	409,409	1.8
09	1,340	229,511	1.0
10	814	145,283	0.7
11	463	87,205	0.4
12	260	49,278	0.2
13	140	25,359	0.1
14	77	14,076	0.1
15	46	8,878	0.0
16	26	4,998	0.0
17	17	3,049	0.0
18	12	2,625	0.0
19	8	1,360	0.0
20	7	1,247	0.0
21	5	693	0.0
22	5	693	0.0
23	6	813	0.0
24	3	247	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Origin purpose

O_PURPOSE	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,034	0.0
Home	44,028	7,918,568	35.6
Work	17,645	2,866,885	12.9
Work-related	2,466	381,671	1.7
Shop	23,600	3,746,507	16.8
Daycare	725	168,541	0.8
School	5,033	1,260,960	5.7
Other	19,962	3,245,531	14.6
Drop Off/Pick Up Someone	8,431	1,904,470	8.6
Parking Point	47	8,537	0.0
Inter-City Rail Terminal	24	2,616	0.0
Inter-City Bus Terminal	10	2,939	0.0
Airport	351	54,646	0.2
Gas/EV Charging Station	1,996	332,998	1.5
External Point	2,545	372,739	1.7
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Origin activity

O_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,034	0.0
Home	43,788	7,898,292	35.5
Work	21,345	3,421,704	15.4
Volunteer	1,357	219,736	1.0
School	5,114	1,276,286	5.7
Shopping	14,138	2,260,456	10.2
Meal (quick-stop)	3,655	584,689	2.6
Meal	6,239	962,441	4.3
Gas	2,063	342,114	1.5
Health care	2,890	467,541	2.1
Non-shopping errand	4,346	692,818	3.1
Socialize	2,952	470,407	2.1
Civic/Religious	1,526	253,752	1.1
Exercise	2,996	466,236	2.1
Recreation	2,003	381,651	1.7
Entertainment	703	119,547	0.5
Drop off/pick up	8,561	1,924,834	8.6
Other	3,187	525,104	2.4
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Origin activity

MPO_O_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	23,497	3,341,566	15.0
At home	35,503	6,667,842	29.9
Work at home	478	88,781	0.4
Work	15,507	2,574,743	11.6
Work-related	2,107	342,335	1.5
Volunteer	1,139	191,281	0.9
Drop off/pick up	7,063	1,648,541	7.4
Attend school	3,592	951,892	4.3
Other school-related	553	132,005	0.6
Childcare	726	168,765	0.8
Adult care	29	5,570	0.0
Shop	11,360	1,902,998	8.5
Meal/coffee or drink	5,066	816,875	3.7
Quick stop food/coffee	3,081	506,062	2.3
Fuel vehicle	1,585	282,254	1.3
Healthcare	2,309	391,185	1.8
Personal services	2,573	409,073	1.8
Entertainment	566	102,718	0.5
Socialize	2,283	383,721	1.7
Recreation	1,563	312,518	1.4
Exercise	2,321	382,080	1.7
Civic/Religious	1,297	222,912	1.0
Postal	861	123,871	0.6
Airport	411	62,999	0.3
Inter-City Train Terminal	31	3,394	0.0
Inter-City Bus Terminal	12	3,182	0.0
Parking Location	48	8,673	0.0
Other Residence/Hotel/Resort	176	34,554	0.2
Other	1,137	207,251	0.9
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

ORIGIN address: State-County FIPS Code Combination

O_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	47	4,438	0.0
Alabama	1	53	0.0
Arizona	3	206	0.0
Arkansas	1	51	0.0
California	49	11,328	0.1
Colorado	10	965	0.0
Connecticut	3	122	0.0
Delaware	53	9,157	0.0
District of Columbia	17,570	2,777,899	12.5
Florida	26	3,500	0.0
Georgia	5	1,599	0.0
Illinois	14	2,149	0.0
Indiana	7	550	0.0
Kentucky	4	588	0.0
Louisiana	4	403	0.0
Allegany County, Maryland	6	836	0.0
Anne Arundel County, Maryland	11,130	1,669,445	7.5
Baltimore County, Maryland	817	104,776	0.5
Calvert County, Maryland	1,343	232,382	1.0
Caroline County, Maryland	6	822	0.0
Carroll County, Maryland	3,767	445,598	2.0
Cecil County, Maryland	6	887	0.0
Charles County, Maryland	2,628	422,580	1.9
Dorchester County, Maryland	12	1,119	0.0
Frederick County, Maryland	4,389	744,604	3.3
Garrett County, Maryland	1	204	0.0
Harford County, Maryland	21	3,100	0.0
Howard County, Maryland	6,293	987,923	4.4
Kent County, Maryland	9	659	0.0
Montgomery County, Maryland	15,955	3,256,955	14.6
Prince George's County, Maryland	11,970	2,256,552	10.1
Queen Anne's County, Maryland	36	3,402	0.0
St. Mary's County, Maryland	1,887	353,524	1.6
Somerset County, Maryland	1	235	0.0
Talbot County, Maryland	14	1,873	0.0
Washington County, Maryland	50	8,345	0.0
Wicomico County, Maryland	10	616	0.0
Worcester County, Maryland	32	2,611	0.0
Baltimore city, Maryland	629	94,542	0.4

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

ORIGIN address: State-County FIPS Code Combination

O_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Massachusetts	5	496	0.0
Michigan	4	307	0.0
Minnesota	5	903	0.0
Montana	1	54	0.0
Nebraska	1	225	0.0
Nevada	2	292	0.0
New Hampshire	8	468	0.0
New Jersey	17	4,335	0.0
New York	36	6,922	0.0
North Carolina	22	3,187	0.0
Ohio	11	1,662	0.0
Oregon	1	107	0.0
Pennsylvania	164	25,931	0.1
South Carolina	7	658	0.0
Texas	3	305	0.0
Utah	1	54	0.0
Accomack County, Virginia	1	175	0.0
Albemarle County, Virginia	6	973	0.0
Amherst County, Virginia	2	220	0.0
Arlington County, Virginia	7,395	907,856	4.1
Caroline County, Virginia	13	2,090	0.0
Chesterfield County, Virginia	7	1,312	0.0
Clarke County, Virginia	273	26,693	0.1
Culpeper County, Virginia	13	2,310	0.0
Dinwiddie County, Virginia	1	277	0.0
Fairfax County, Virginia	15,982	3,427,475	15.4
Fauquier County, Virginia	1,109	156,898	0.7
Frederick County, Virginia	49	5,638	0.0
Greene County, Virginia	1	69	0.0
Hanover County, Virginia	7	1,597	0.0
Henrico County, Virginia	18	3,324	0.0
King George County, Virginia	400	79,960	0.4
Lancaster County, Virginia	4	273	0.0
Loudoun County, Virginia	6,745	1,115,062	5.0
Louisa County, Virginia	6	1,336	0.0
Madison County, Virginia	1	82	0.0
Montgomery County, Virginia	1	276	0.0
New Kent County, Virginia	1	48	0.0
Northumberland County, Virginia	3	512	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

ORIGIN address: State-County FIPS Code Combination

O_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Nottoway County, Virginia	1	200	0.0
Orange County, Virginia	10	2,158	0.0
Page County, Virginia	4	555	0.0
Prince George County, Virginia	1	300	0.0
Prince William County, Virginia	5,559	1,258,637	5.7
Rappahannock County, Virginia	2	488	0.0
Roanoke County, Virginia	2	247	0.0
Shenandoah County, Virginia	7	719	0.0
Spotsylvania County, Virginia	1,181	312,440	1.4
Stafford County, Virginia	1,317	341,652	1.5
Warren County, Virginia	13	1,340	0.0
Westmoreland County, Virginia	7	1,812	0.0
York County, Virginia	1	116	0.0
Alexandria city, Virginia	3,562	512,996	2.3
Charlottesville city, Virginia	4	564	0.0
Fairfax city, Virginia	693	109,269	0.5
Falls Church city, Virginia	622	90,458	0.4
Fredericksburg city, Virginia	580	126,593	0.6
Harrisonburg city, Virginia	1	138	0.0
Lexington city, Virginia	2	756	0.0
Lynchburg city, Virginia	2	1,232	0.0
Manassas city, Virginia	1,061	155,913	0.7
Manassas Park city, Virginia	175	32,455	0.1
Newport News city, Virginia	2	214	0.0
Norfolk city, Virginia	8	1,508	0.0
Richmond city, Virginia	16	2,967	0.0
Roanoke city, Virginia	4	345	0.0
Waynesboro city, Virginia	1	133	0.0
Williamsburg city, Virginia	4	519	0.0
Winchester city, Virginia	24	3,160	0.0
Washington	3	208	0.0
West Virginia	5	564	0.0
Berkeley County, West Virginia	47	5,936	0.0
Jefferson County, West Virginia	815	115,701	0.5
Wisconsin	3	390	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTRDFIN

The SURVEYFREQ Procedure

Destination purpose

D_PURPOSE	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,154	0.0
Home	43,780	7,876,661	35.4
Work	17,622	2,862,927	12.9
Work-related	2,466	381,967	1.7
Shop	23,617	3,747,099	16.8
Daycare	727	168,670	0.8
School	5,036	1,262,937	5.7
Other	19,894	3,233,047	14.5
Drop Off/Pick Up Someone	8,437	1,908,288	8.6
Parking Point	47	8,537	0.0
Inter-City Rail Terminal	24	2,616	0.0
Inter-City Bus Terminal	9	2,570	0.0
Airport	352	53,999	0.2
Gas/EV Charging Station	1,994	332,656	1.5
External Point	2,858	425,513	1.9
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Destination activity

D_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,154	0.0
Home	43,601	7,857,850	35.3
Work	21,298	3,419,921	15.4
Volunteer	1,359	217,442	1.0
School	5,121	1,279,828	5.7
Shopping	14,121	2,257,938	10.1
Meal (quick-stop)	3,655	584,801	2.6
Meal	6,271	966,449	4.3
Gas	2,067	342,188	1.5
Health care	2,909	470,621	2.1
Non-shopping errand	4,344	692,190	3.1
Socialize	3,108	498,271	2.2
Civic/Religious	1,526	254,365	1.1
Exercise	2,978	465,287	2.1
Recreation	2,038	386,736	1.7
Entertainment	711	120,429	0.5
Drop off/pick up	8,574	1,929,622	8.7
Other	3,182	523,549	2.4
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Destination activity

MPO_D_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	23,497	3,341,566	15.0
At home	34,849	6,558,748	29.5
Work at home	939	169,957	0.8
Work	15,502	2,572,420	11.6
Work-related	2,127	344,684	1.5
Volunteer	1,140	189,281	0.8
Drop off/pick up	7,078	1,653,509	7.4
Attend school	3,602	954,987	4.3
Other school-related	557	132,692	0.6
Childcare	728	168,894	0.8
Adult care	29	5,570	0.0
Shop	11,345	1,900,775	8.5
Meal/coffee or drink	5,062	817,143	3.7
Quick stop food/coffee	3,087	506,636	2.3
Fuel vehicle	1,588	282,295	1.3
Healthcare	2,331	394,742	1.8
Personal services	2,568	408,198	1.8
Entertainment	566	102,741	0.5
Socialize	2,411	406,861	1.8
Recreation	1,589	316,186	1.4
Exercise	2,322	382,122	1.7
Civic/Religious	1,296	223,380	1.0
Postal	858	123,213	0.6
Airport	453	70,591	0.3
Inter-City Train Terminal	36	3,963	0.0
Inter-City Bus Terminal	15	4,841	0.0
Parking Location	47	8,537	0.0
Other Residence/Hotel/Resort	476	83,597	0.4
Other	776	141,512	0.6
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	69	8,069	0.0
Alabama	2	310	0.0
Arizona	4	322	0.0
California	56	12,363	0.1
Colorado	11	1,036	0.0
Connecticut	9	2,373	0.0
Delaware	68	10,603	0.0
District of Columbia	17,531	2,771,543	12.4
Florida	36	5,641	0.0
Georgia	9	1,375	0.0
Illinois	10	1,888	0.0
Indiana	9	1,069	0.0
Kansas	4	602	0.0
Louisiana	4	734	0.0
Allegany County, Maryland	6	655	0.0
Anne Arundel County, Maryland	11,080	1,658,709	7.4
Baltimore County, Maryland	832	106,571	0.5
Calvert County, Maryland	1,334	230,970	1.0
Caroline County, Maryland	7	984	0.0
Carroll County, Maryland	3,750	441,780	2.0
Cecil County, Maryland	8	871	0.0
Charles County, Maryland	2,617	419,589	1.9
Dorchester County, Maryland	13	1,384	0.0
Frederick County, Maryland	4,375	742,548	3.3
Harford County, Maryland	33	4,963	0.0
Howard County, Maryland	6,282	987,242	4.4
Kent County, Maryland	10	623	0.0
Montgomery County, Maryland	15,961	3,256,067	14.6
Prince George's County, Maryland	11,909	2,247,617	10.1
Queen Anne's County, Maryland	40	4,255	0.0
St. Mary's County, Maryland	1,886	353,851	1.6
Somerset County, Maryland	1	235	0.0
Talbot County, Maryland	17	2,111	0.0
Washington County, Maryland	50	8,066	0.0
Wicomico County, Maryland	11	526	0.0
Worcester County, Maryland	54	4,451	0.0
Baltimore city, Maryland	623	92,303	0.4
Massachusetts	14	1,003	0.0
Michigan	5	243	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Minnesota	2	191	0.0
Missouri	3	508	0.0
Montana	3	259	0.0
Nebraska	1	136	0.0
Nevada	4	488	0.0
New Hampshire	4	234	0.0
New Jersey	33	7,544	0.0
New Mexico	3	325	0.0
New York	69	14,291	0.1
New York County, New York	1	104	0.0
North Carolina	50	8,746	0.0
Ohio	11	1,545	0.0
Oklahoma	2	736	0.0
Oregon	1	388	0.0
Pennsylvania	200	32,372	0.1
Rhode Island	1	142	0.0
South Carolina	8	1,251	0.0
Tennessee	2	247	0.0
Texas	12	1,602	0.0
Utah	2	479	0.0
Accomack County, Virginia	1	163	0.0
Albemarle County, Virginia	7	1,030	0.0
Alleghany County, Virginia	1	170	0.0
Appomattox County, Virginia	1	129	0.0
Arlington County, Virginia	7,371	906,657	4.1
Augusta County, Virginia	2	221	0.0
Caroline County, Virginia	13	2,009	0.0
Chesterfield County, Virginia	6	1,073	0.0
Clarke County, Virginia	272	26,624	0.1
Culpeper County, Virginia	10	1,751	0.0
Dinwiddie County, Virginia	2	627	0.0
Essex County, Virginia	1	203	0.0
Fairfax County, Virginia	15,959	3,422,178	15.4
Fauquier County, Virginia	1,109	156,941	0.7
Fluvanna County, Virginia	2	320	0.0
Frederick County, Virginia	45	6,197	0.0
Goochland County, Virginia	2	340	0.0
Hanover County, Virginia	12	2,217	0.0
Henrico County, Virginia	29	4,626	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
James City County, Virginia	2	242	0.0
King and Queen County, Virginia	1	128	0.0
King George County, Virginia	401	80,057	0.4
Lancaster County, Virginia	4	273	0.0
Loudoun County, Virginia	6,720	1,111,275	5.0
Louisa County, Virginia	5	829	0.0
Lunenburg County, Virginia	2	126	0.0
Montgomery County, Virginia	1	276	0.0
Nelson County, Virginia	2	238	0.0
New Kent County, Virginia	1	48	0.0
Northumberland County, Virginia	3	154	0.0
Orange County, Virginia	14	3,062	0.0
Page County, Virginia	2	128	0.0
Prince Edward County, Virginia	1	232	0.0
Prince George County, Virginia	1	300	0.0
Prince William County, Virginia	5,545	1,257,509	5.6
Pulaski County, Virginia	3	579	0.0
Rappahannock County, Virginia	3	707	0.0
Roanoke County, Virginia	3	327	0.0
Rockingham County, Virginia	4	1,265	0.0
Shenandoah County, Virginia	9	955	0.0
Spotsylvania County, Virginia	1,175	311,217	1.4
Stafford County, Virginia	1,320	342,341	1.5
Warren County, Virginia	16	1,774	0.0
Westmoreland County, Virginia	7	1,795	0.0
Wythe County, Virginia	1	181	0.0
York County, Virginia	6	2,088	0.0
Alexandria city, Virginia	3,536	509,428	2.3
Charlottesville city, Virginia	5	687	0.0
Colonial Heights city, Virginia	1	125	0.0
Fairfax city, Virginia	699	109,956	0.5
Falls Church city, Virginia	620	89,936	0.4
Fredericksburg city, Virginia	579	126,409	0.6
Hampton city, Virginia	1	100	0.0
Lexington city, Virginia	3	1,134	0.0
Lynchburg city, Virginia	1	616	0.0
Manassas city, Virginia	1,055	154,690	0.7
Manassas Park city, Virginia	175	32,607	0.1
Newport News city, Virginia	4	773	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Norfolk city, Virginia	9	1,942	0.0
Petersburg city, Virginia	2	328	0.0
Richmond city, Virginia	12	2,311	0.0
Roanoke city, Virginia	5	431	0.0
Virginia Beach city, Virginia	4	1,203	0.0
Waynesboro city, Virginia	1	133	0.0
Williamsburg city, Virginia	2	413	0.0
Winchester city, Virginia	27	3,413	0.0
Washington	2	288	0.0
West Virginia	10	1,320	0.0
Berkeley County, West Virginia	48	5,997	0.0
Jefferson County, West Virginia	820	116,176	0.5
Wisconsin	4	510	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTRDFIN

The SURVEYFREQ Procedure

Trip departure time

DEPARTURE_ TIME_HHMM	Record Count	Weighted Total	Percent of Total
00:00-03:59	619	102,032	0.5
04:00-04:59	524	86,746	0.4
05:00-05:29	650	110,601	0.5
05:30-05:59	1,103	191,550	0.9
06:00-06:29	1,721	280,347	1.3
06:30-06:59	2,716	499,036	2.2
07:00-07:29	4,460	830,355	3.7
07:30-07:59	5,097	1,015,431	4.6
08:00-08:29	4,985	934,297	4.2
08:30-08:59	4,719	910,399	4.1
09:00-09:29	3,787	684,746	3.1
09:30-09:59	3,032	512,435	2.3
10:00-10:29	3,073	510,315	2.3
10:30-10:59	2,969	463,774	2.1
11:00-11:59	7,245	1,206,583	5.4
12:00-12:59	8,249	1,319,434	5.9
13:00-13:59	7,443	1,225,739	5.5
14:00-14:59	8,009	1,423,477	6.4
15:00-15:29	4,896	916,794	4.1
15:30-15:59	4,854	910,519	4.1
16:00-16:29	5,368	993,781	4.5
16:30-16:59	5,383	958,585	4.3
17:00-17:29	6,330	1,124,322	5.0
17:30-17:59	5,458	956,895	4.3
18:00-18:29	5,227	925,457	4.2
18:30-18:59	4,120	689,959	3.1
19:00-19:29	3,422	561,227	2.5
19:30-19:59	2,562	418,859	1.9
20:00-20:59	4,346	755,749	3.4
21:00-21:59	2,615	428,410	1.9
22:00-22:59	1,293	218,538	1.0
23:00-23:59	599	103,250	0.5
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Trip arrival time

ARRIVAL_TIME_ HHMM	Record Count	Weighted Total	Percent of Total
00:00-03:59	788	133,099	0.6
04:00-04:59	226	36,246	0.2
05:00-05:29	309	52,741	0.2
05:30-05:59	611	100,943	0.5
06:00-06:29	1,038	181,125	0.8
06:30-06:59	1,723	289,186	1.3
07:00-07:29	3,337	620,432	2.8
07:30-07:59	4,572	893,946	4.0
08:00-08:29	5,201	1,013,609	4.6
08:30-08:59	5,153	995,357	4.5
09:00-09:29	5,012	920,344	4.1
09:30-09:59	3,411	580,609	2.6
10:00-10:29	3,240	529,343	2.4
10:30-10:59	2,957	477,641	2.1
11:00-11:59	6,972	1,153,995	5.2
12:00-12:59	8,246	1,327,798	6.0
13:00-13:59	7,478	1,215,404	5.5
14:00-14:59	7,363	1,272,702	5.7
15:00-15:29	4,377	821,919	3.7
15:30-15:59	4,409	825,979	3.7
16:00-16:29	5,042	980,960	4.4
16:30-16:59	4,883	887,314	4.0
17:00-17:29	5,763	1,021,844	4.6
17:30-17:59	5,808	1,009,750	4.5
18:00-18:29	6,081	1,070,116	4.8
18:30-18:59	5,056	870,596	3.9
19:00-19:29	4,358	721,861	3.2
19:30-19:59	3,136	514,671	2.3
20:00-20:59	4,841	833,626	3.7
21:00-21:59	3,034	505,700	2.3
22:00-22:59	1,615	259,692	1.2
23:00-23:59	834	151,095	0.7
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Primary travel mode

TRAVEL_MODE	Record Count	Weighted Total	Percent of Total
Walk	11,763	1,800,965	8.1
Bike	1,415	246,788	1.1
Motorcycle	31	3,737	0.0
Auto (driver)	78,127	13,047,672	58.6
Auto (passenger)	22,119	4,837,296	21.7
School Bus	2,980	796,465	3.6
Rail	6,265	896,998	4.0
Bus	2,136	344,060	1.5
Private Bus	245	38,793	0.2
Paratransit	111	18,914	0.1
Taxi / Private Car	254	39,082	0.2
Uber/Lyft/Rideshare	1,024	144,304	0.6
Air	266	40,270	0.2
Other	138	14,297	0.1
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTRDFIN

The SURVEYFREQ Procedure

Primary travel mode

MPO_TRAVEL_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	23,497	3,341,566	15.0
Drive Alone	46,496	7,763,113	34.9
Drive Others	15,017	3,045,835	13.7
Auto Passenger	17,557	4,096,930	18.4
Subway	5,606	798,958	3.6
Local_Bus	1,823	300,875	1.4
Commuter_Rail	359	63,686	0.3
Express_Commuter_Bus	188	27,733	0.1
Light_Rail	10	1,209	0.0
Shuttle_Bus	204	33,070	0.1
Paratransit	109	18,812	0.1
Ridehailing	975	134,671	0.6
Taxi	240	37,876	0.2
School_Bus	2,364	655,006	2.9
Walk	10,774	1,666,905	7.5
Bike	1,328	235,478	1.1
Intercity_Rail	23	3,399	0.0
Intercity_Bus	15	2,928	0.0
Air	235	35,143	0.2
Other	19	1,696	0.0
Charter Bus	10	1,512	0.0
Motorcycle	25	3,240	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Travel mode used for transit access

TRANSIT_ACCESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	115,820	20,280,907	91.1
Walking	9,586	1,724,991	7.7
Bicycle	79	13,386	0.1
Park and ride	830	138,614	0.6
Kiss and ride	360	84,162	0.4
Taxi / Uber / Lyft	45	6,965	0.0
Some other mode	154	20,617	0.1
Total	126,874	22,269,641	100.0

Travel mode used for transit egress

TRANSIT_EGRESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	115,817	20,280,350	91.1
Walking	9,658	1,743,105	7.8
Bicycle	77	11,366	0.1
Park and ride	722	120,902	0.5
Kiss and ride	363	81,096	0.4
Taxi / Uber / Lyft	85	11,322	0.1
Some other mode	152	21,500	0.1
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Total number of travelers on trip including self (derived)

TRAVELERS_TOTAL	Record Count	Weighted Total	Percent of Total
1	76,184	11,925,113	53.5
2	30,987	5,486,526	24.6
3	10,642	2,371,628	10.6
4	4,363	1,162,181	5.2
5	1,239	413,851	1.9
6	2,402	614,725	2.8
7	731	209,174	0.9
8	174	52,079	0.2
9	45	16,881	0.1
10	6	1,437	0.0
11	29	7,837	0.0
13	3	158	0.0
16	2	77	0.0
17	1	67	0.0
19	2	213	0.0
21	23	2,124	0.0
23	2	281	0.0
25	2	133	0.0
26	10	1,298	0.0
31	11	1,888	0.0
33	2	133	0.0
36	2	134	0.0
41	4	595	0.0
46	6	734	0.0
61	2	371	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Household members on trip including self (derived)

TRAVELERS_HH	Record Count	Weighted Total	Percent of Total
1 Household member	86,573	13,645,190	61.3
2 Household members	27,839	5,148,868	23.1
3 Household members	8,222	2,011,856	9.0
4 Household members	3,209	1,006,382	4.5
5 Household members	693	293,810	1.3
6 Household members	246	128,847	0.6
7 Household members Household members	76	29,778	0.1
8 or more Household members	16	4,912	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Non-household members on trip

TRAVELERS_NONHH	Record Count	Weighted Total	Percent of Total
0	112,176	19,622,566	88.1
1	8,598	1,393,216	6.3
2	2,332	419,881	1.9
3	679	119,357	0.5
4	300	61,402	0.3
5	2,701	642,991	2.9
6	1	72	0.0
7	2	355	0.0
9	4	857	0.0
10	9	736	0.0
12	3	158	0.0
15	2	77	0.0
16	1	67	0.0
18	2	213	0.0
19	6	354	0.0
20	17	1,770	0.0
22	2	281	0.0
23	2	133	0.0
25	10	1,298	0.0
30	11	1,888	0.0
32	2	133	0.0
34	2	134	0.0
39	2	530	0.0
40	2	66	0.0
45	6	734	0.0
60	2	371	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Trip mode: Household vehicle

MODE_HH_VEHICLE	Record Count	Weighted Total	Percent of Total
Not ascertained	32,116	5,361,659	24.1
Household Vehicle 1	60,223	10,117,258	45.4
Household Vehicle 2	27,945	5,294,485	23.8
Household Vehicle 3	5,247	1,168,489	5.2
Household Vehicle 4	1,056	244,493	1.1
Household Vehicle 5	242	68,293	0.3
Household Vehicle 6	27	8,627	0.0
Household Vehicle 7	18	6,337	0.0
Total	126,874	22,269,641	100.0

Trip mode: Other car, truck, van

MPO_MODE_OTHER_VEHICLE	Record Count	Weighted Total	Percent of Total
Not ascertained	125,640	22,040,531	99.0
Rental vehicle	97	23,188	0.1
Vehicle from work	91	15,299	0.1
Someone else's vehicle	921	165,069	0.7
Carshare vehicle	30	4,305	0.0
Other	95	21,249	0.1
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Vehicle occupancy

VEHICLE_ OCCUPANCY	Record Count	Weighted Total	Percent of Total
Not ascertained	46,380	8,957,506	40.2
1	59,014	9,399,738	42.2
2	15,494	2,629,949	11.8
3	4,077	823,244	3.7
4	1,417	321,817	1.4
5	319	87,498	0.4
6	137	38,514	0.2
7	30	9,710	0.0
8	4	969	0.0
11	2	696	0.0
Total	126,874	22,269,641	100.0

Auto trip: If driver: Parking location at/near destination

PARK_LOC	Record Count	Weighted Total	Percent of Total
Not ascertained	39,675	6,786,701	30.5
Driveway/garage	23,278	4,376,825	19.7
Parking lot/garage	49,066	8,326,858	37.4
On street parking	7,671	1,288,603	5.8
Other	7,184	1,490,654	6.7
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Auto trip: If driver: Parking location at/near destination

MPO_PARK_LOC	Record Count	Weighted Total	Percent of Total
Not ascertained	57,258	9,272,102	41.6
Own driveway/garage	17,487	3,437,169	15.4
Someone else's driveway	1,217	230,540	1.0
Parking lot/garage	38,008	6,850,944	30.8
On street parking	6,549	1,139,861	5.1
Park and ride lot	374	70,870	0.3
Didn't park-waited	5,225	1,148,979	5.2
Other	756	119,176	0.5
Total	126,874	22,269,641	100.0

Auto trip: If driver: If paid for parking on travel date: If parking location was lot/garage, on-street, park/ride: Parking payment method

PARK_PAY	Record Count	Weighted Total	Percent of Total
Not ascertained	119,423	21,098,363	94.7
No	5,291	829,465	3.7
Yes	2,160	341,813	1.5
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Auto trip: If driver: If paid for parking on travel date: If parking location was lot/garage, on-street, park/ride: Parking payment method

MPO_PARK_PAY	Record Count	Weighted Total	Percent of Total
Not ascertained	120,667	21,245,873	95.4
No, parking was free	3,922	657,185	3.0
No, employer paid	254	42,725	0.2
No, paid by store, etc.	71	10,021	0.0
Yes, cash, credit card, ticket	1,691	275,467	1.2
Other	262	36,947	0.2
Don't know	7	1,423	0.0
Total	126,874	22,269,641	100.0

Subway system used on trip

SUBWAY_USED	Record Count	Weighted Total	Percent of Total
Not ascertained	97,678	18,114,611	81.3
No	23,292	3,320,694	14.9
Yes	5,904	834,336	3.7
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: Fare payment method

SUBWAY_PAY	Record Count	Weighted Total	Percent of Total
Not ascertained	120,997	21,438,745	96.3
SmarTrip (regular fare)	4,983	706,775	3.2
CharmCard (regular fare)	5	337	0.0
Single trip fare	17	1,515	0.0
Round trip fare	8	1,272	0.0
Monthly pass	232	25,300	0.1
Weekly pass	11	961	0.0
Daily pass	7	565	0.0
Transit Link Card	21	2,901	0.0
Senior/disabled fare	262	37,255	0.2
Youth/student fare	63	13,480	0.1
Don't know	268	40,535	0.2
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant boarded

SUBWAY_STATION_BOARD	Record Count	Weighted Total	Percent of Total
Not ascertained	120,971	21,435,816	96.3
Addison Road	21	3,926	0.0
Anacostia	36	6,586	0.0
Archives	85	9,593	0.0
Arlington Cemetery	1	107	0.0
Ballston - MU	122	14,434	0.1
Benning Road	12	2,183	0.0
Bethesda	102	13,325	0.1
Braddock Road	71	8,033	0.0
Branch Avenue	36	5,523	0.0
Brookland - CUA	49	8,383	0.0
Capitol Heights	17	3,892	0.0
Capitol South	65	8,427	0.0
Cheverly	15	2,612	0.0
Clarendon	49	5,789	0.0
Cleveland Park	48	5,970	0.0
College Park - University of Maryland	35	4,284	0.0
Columbia Heights	95	14,661	0.1
Congress Heights	19	4,960	0.0
Court House	69	7,919	0.0
Crystal City	172	18,021	0.1
Deanwood	11	2,054	0.0
Dunn Loring	41	6,125	0.0
Dupont Circle	171	26,402	0.1
East Falls Church	40	5,327	0.0
Eastern Market	66	9,218	0.0
Eisenhower Avenue	17	1,837	0.0
Farragut North	234	38,378	0.2
Farragut West	202	24,680	0.1
Federal Center SW	62	9,192	0.0
Federal Triangle	71	10,111	0.0
Foggy Bottom - GWU	178	19,910	0.1
Forest Glen	15	2,656	0.0
Franconia - Springfield	27	6,602	0.0
Friendship Heights	65	11,499	0.1
Georgia Avenue - Petworth	58	8,046	0.0
Glenmont	43	10,048	0.0
Greensboro	7	1,177	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant boarded

SUBWAY_STATION_BOARD	Record Count	Weighted Total	Percent of Total
Greenbelt	51	7,609	0.0
Grosvenor - Strathmore	43	6,102	0.0
Huntington	48	7,608	0.0
Judiciary Square	66	9,748	0.0
King Street - Old Town	72	8,519	0.0
Landover	11	2,264	0.0
Largo Town Center	34	7,967	0.0
McLean	13	2,162	0.0
McPherson Square	114	16,269	0.1
Medical Center	44	6,178	0.0
Minnesota Avenue	22	3,248	0.0
Morgan Boulevard	13	1,489	0.0
Mount Vernon Square	22	2,829	0.0
Navy Yard - Ballpark	98	13,035	0.1
Naylor Road	15	2,633	0.0
New Carrollton	54	7,344	0.0
NoMa - Gallaudet U	75	12,018	0.1
Pentagon	131	20,399	0.1
Pentagon City	206	14,055	0.1
Potomac Avenue	32	4,835	0.0
Prince George's Plaza	58	5,630	0.0
Rhode Island Avenue - Brentwood	39	6,486	0.0
Rockville	35	5,035	0.0
Ronald Reagan Washington National Airport	25	3,275	0.0
Rosslyn	129	15,392	0.1
Shady Grove	96	16,773	0.1
Shaw - Howard University	32	4,234	0.0
Silver Spring	103	14,863	0.1
Smithsonian	55	7,348	0.0
Southern Avenue	27	4,856	0.0
Spring Hill	4	440	0.0
Stadium - Armory	29	3,844	0.0
Suitland	51	9,627	0.0
Takoma	66	9,238	0.0
Tenleytown - AU	47	7,075	0.0
Twinbrook	34	4,961	0.0
Tysons Corner	17	1,895	0.0
U Street	51	7,031	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant boarded

SUBWAY_STATION_BOARD	Record Count	Weighted Total	Percent of Total
Union Station	216	27,628	0.1
Van Dorn Street	24	2,969	0.0
Van Ness - UDC	49	9,418	0.0
Vienna	68	15,082	0.1
Virginia Square - GMU	50	4,712	0.0
Waterfront	38	5,105	0.0
West Falls Church	13	2,725	0.0
West Hyattsville	37	3,420	0.0
Wheaton	34	5,907	0.0
White Flint	34	5,323	0.0
Wiehle - Reston East	54	8,888	0.0
Woodley Park	43	5,989	0.0
Owings Mills	8	723	0.0
Lexington Market	3	232	0.0
Charles Center	1	35	0.0
Johns Hopkins Hospital	6	612	0.0
Fort Totten	57	10,199	0.0
Gallery Place	195	32,097	0.1
L'Enfant Plaza	235	30,521	0.1
Metro Center	218	33,091	0.1
Bowie State	4	505	0.0
BWI Airport Rail Station	2	248	0.0
Camden Station	2	323	0.0
Dorsey	6	566	0.0
Halethorpe	1	93	0.0
Odenton	14	800	0.0
Savage	1	21	0.0
West Baltimore	1	390	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Travel mode used for subway access

SUBWAY_ACCESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	120,528	21,320,468	95.7
Walk	5,295	774,538	3.5
Bike	60	9,102	0.0
Auto (driver)	590	99,511	0.4
Auto (passenger)	200	38,832	0.2
Other	201	27,190	0.1
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant exited

SUBWAY_STATION_EXIT	Record Count	Weighted Total	Percent of Total
Not ascertained	120,972	21,435,936	96.3
Addison Road	23	4,031	0.0
Anacostia	43	7,267	0.0
Archives	80	10,207	0.0
Arlington Cemetery	1	107	0.0
Ballston - MU	117	14,189	0.1
Benning Road	19	7,076	0.0
Bethesda	101	14,384	0.1
Braddock Road	62	7,182	0.0
Branch Avenue	33	4,948	0.0
Brookland - CUA	46	7,603	0.0
Capitol Heights	14	2,719	0.0
Capitol South	63	8,434	0.0
Cheverly	13	2,252	0.0
Clarendon	53	6,882	0.0
Cleveland Park	52	6,508	0.0
College Park - University of Maryland	33	3,620	0.0
Columbia Heights	89	13,825	0.1
Congress Heights	15	4,208	0.0
Court House	69	8,539	0.0
Crystal City	180	18,905	0.1
Deanwood	10	1,801	0.0
Dunn Loring	40	6,197	0.0
Dupont Circle	153	24,386	0.1
East Falls Church	41	5,756	0.0
Eastern Market	66	9,253	0.0
Eisenhower Avenue	17	1,850	0.0
Farragut North	235	37,277	0.2
Farragut West	203	24,777	0.1
Federal Center SW	70	10,370	0.0
Federal Triangle	82	11,164	0.1
Foggy Bottom - GWU	195	22,465	0.1
Forest Glen	15	2,671	0.0
Franconia - Springfield	29	7,019	0.0
Friendship Heights	69	12,855	0.1
Georgia Avenue - Petworth	48	6,557	0.0
Glenmont	44	9,451	0.0
Greensboro	7	1,236	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant exited

SUBWAY_STATION_EXIT	Record Count	Weighted Total	Percent of Total
Greenbelt	51	7,098	0.0
Grosvenor - Strathmore	40	5,781	0.0
Huntington	54	8,378	0.0
Judiciary Square	78	11,797	0.1
King Street - Old Town	78	8,983	0.0
Landover	10	1,944	0.0
Largo Town Center	30	7,311	0.0
McLean	10	1,595	0.0
McPherson Square	136	18,773	0.1
Medical Center	47	6,247	0.0
Minnesota Avenue	20	2,808	0.0
Morgan Boulevard	14	1,632	0.0
Mount Vernon Square	26	3,498	0.0
Navy Yard - Ballpark	104	14,000	0.1
Naylor Road	16	2,514	0.0
New Carrollton	50	6,467	0.0
NoMa - Gallaudet U	69	10,621	0.0
Pentagon	118	17,896	0.1
Pentagon City	194	12,977	0.1
Potomac Avenue	33	5,100	0.0
Prince George's Plaza	57	6,332	0.0
Rhode Island Avenue - Brentwood	37	6,508	0.0
Rockville	33	4,382	0.0
Ronald Reagan Washington National Airport	36	5,347	0.0
Rosslyn	122	14,264	0.1
Shady Grove	100	17,002	0.1
Shaw - Howard University	33	4,459	0.0
Silver Spring	91	13,848	0.1
Smithsonian	58	7,897	0.0
Southern Avenue	30	5,140	0.0
Spring Hill	3	301	0.0
Stadium - Armory	25	3,434	0.0
Suitland	47	6,000	0.0
Takoma	65	9,342	0.0
Tenleytown - AU	47	7,949	0.0
Twinbrook	37	5,087	0.0
Tysons Corner	22	2,448	0.0
U Street	43	5,727	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant exited

SUBWAY_STATION_EXIT	Record Count	Weighted Total	Percent of Total
Union Station	210	26,051	0.1
Van Dorn Street	21	2,782	0.0
Van Ness - UDC	56	9,735	0.0
Vienna	68	14,497	0.1
Virginia Square - GMU	52	4,679	0.0
Waterfront	36	5,044	0.0
West Falls Church	13	2,702	0.0
West Hyattsville	33	3,075	0.0
Wheaton	34	5,609	0.0
White Flint	35	5,813	0.0
Wiehle - Reston East	54	8,562	0.0
Woodley Park	39	5,266	0.0
Owings Mills	7	507	0.0
Lexington Market	4	332	0.0
Charles Center	1	35	0.0
Johns Hopkins Hospital	5	675	0.0
Fort Totten	60	10,430	0.0
Gallery Place	190	32,755	0.1
L'Enfant Plaza	229	28,450	0.1
Metro Center	230	34,709	0.2
Bowie State	3	395	0.0
BWI Airport Rail Station	3	384	0.0
Camden Station	1	119	0.0
Dorsey	4	571	0.0
Halethorpe	1	93	0.0
Kensington	1	49	0.0
Odenton	10	576	0.0
Pennsylvania Station	3	304	0.0
Riverdale	1	75	0.0
Savage	2	95	0.0
West Baltimore	2	480	0.0
Total	126,874	22,269,641	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WTRDFIN

The SURVEYFREQ Procedure

Travel mode used for subway egress

SUBWAY_EGRESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	120,528	21,320,468	95.7
Walk	5,335	780,480	3.5
Bike	59	8,227	0.0
Auto (driver)	486	82,066	0.4
Auto (passenger)	237	46,780	0.2
Other	229	31,620	0.1
Total	126,874	22,269,641	100.0

Auto trip: HOV lane used on trip

HOV_USED	Record Count	Weighted Total	Percent of Total
Not ascertained	126,275	22,141,697	99.4
Yes	599	127,944	0.6
Total	126,874	22,269,641	100.0

Auto trip: HOT lane, toll road, toll bridge, or ferry used on trip

TOLL_ROAD_USED	Record Count	Weighted Total	Percent of Total
Not ascertained	125,001	21,918,747	98.4
Yes	1,873	350,894	1.6
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTTRDFIN

The SURVEYFREQ Procedure

Driving distance (miles) from origin to destination (Google estimate) (derived)

DISTANCE	Record Count	Weighted Total	Percent of Total
Not ascertained	1	143	0.0
< 0.1	2,536	395,873	1.8
0.1 - 0.49	13,314	2,190,104	9.8
0.5 - 0.99	12,537	2,217,463	10.0
1.0 - 1.49	9,593	1,699,454	7.6
0.5 - 1.99	8,366	1,504,807	6.8
2.0 - 2.49	7,258	1,315,689	5.9
2.5 - 2.99	6,211	1,105,875	5.0
3.0 - 3.99	9,897	1,803,678	8.1
4.0 - 4.99	7,699	1,412,659	6.3
5.0 - 6.99	11,115	2,016,642	9.1
7.0 - 9.99	11,168	2,001,504	9.0
10.0 - 14.9	9,870	1,693,568	7.6
15.0 - 19.9	5,742	993,735	4.5
20.0 - 24.9	3,728	613,063	2.8
25.0 - 29.9	2,414	395,524	1.8
30.0 - 39.9	2,593	443,521	2.0
40.0 - 49.9	1,023	172,932	0.8
50.0 - 59.9	590	90,680	0.4
60.0 - 69.9	255	46,625	0.2
70.0 - 79.9	136	23,200	0.1
80.0 - 89.9	80	10,968	0.0
90.0 - 99.9	66	10,813	0.0
100.0-129.9	135	21,507	0.1
130.0-159.9	86	12,751	0.1
160.0-189.9	42	8,365	0.0
190.0+	419	68,499	0.3
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WTRDFIN

The SURVEYFREQ Procedure

Trip duration: minutes (reported) (derived)

REPORTED_ TRAVEL_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	8	529	0.0
0-5	21,924	3,868,950	17.4
6-10	24,318	4,211,921	18.9
11-15	21,182	3,842,220	17.3
16-20	12,754	2,301,651	10.3
21-25	8,317	1,502,404	6.7
26-30	10,795	1,918,750	8.6
31-35	4,645	767,371	3.4
36-40	4,128	686,825	3.1
41-45	4,488	738,682	3.3
46-50	2,290	392,932	1.8
51-55	1,516	253,037	1.1
56-60	2,730	452,625	2.0
61-65	1,062	175,221	0.8
66-70	993	166,863	0.7
71-75	1,132	195,936	0.9
76-80	650	114,019	0.5
81-85	440	78,559	0.4
86-90	770	136,701	0.6
91-95	294	46,046	0.2
96-100	250	44,120	0.2
101-130	1,032	176,035	0.8
131-160	367	54,411	0.2
161-190	209	39,664	0.2
> 190	580	104,172	0.5
Total	126,874	22,269,641	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Data Summary

Number of Observations	126874
Sum of Weights	22283738

Trip number

TRIPNO	Record Count	Weighted Total	Percent of Total
01	32,549	5,851,699	26.3
02	30,902	5,580,238	25.0
03	20,970	3,619,251	16.2
04	16,020	2,734,265	12.3
05	10,077	1,702,866	7.6
06	6,748	1,140,336	5.1
07	3,992	675,852	3.0
08	2,387	408,148	1.8
09	1,340	229,413	1.0
10	814	144,787	0.6
11	463	85,115	0.4
12	260	47,612	0.2
13	140	24,742	0.1
14	77	14,102	0.1
15	46	8,802	0.0
16	26	5,222	0.0
17	17	3,305	0.0
18	12	2,751	0.0
19	8	1,414	0.0
20	7	1,285	0.0
21	5	716	0.0
22	5	716	0.0
23	6	840	0.0
24	3	261	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Origin purpose

O_PURPOSE	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,012	0.0
Home	44,028	7,950,458	35.7
Work	17,645	2,815,708	12.6
Work-related	2,466	370,146	1.7
Shop	23,600	3,756,260	16.9
Daycare	725	172,349	0.8
School	5,033	1,281,287	5.7
Other	19,962	3,246,863	14.6
Drop Off/Pick Up Someone	8,431	1,913,369	8.6
Parking Point	47	7,456	0.0
Inter-City Rail Terminal	24	2,153	0.0
Inter-City Bus Terminal	10	3,084	0.0
Airport	351	51,820	0.2
Gas/EV Charging Station	1,996	333,463	1.5
External Point	2,545	377,310	1.7
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Origin activity

O_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,012	0.0
Home	43,788	7,930,087	35.6
Work	21,345	3,364,508	15.1
Volunteer	1,357	220,645	1.0
School	5,114	1,296,501	5.8
Shopping	14,138	2,284,221	10.3
Meal (quick-stop)	3,655	579,847	2.6
Meal	6,239	953,501	4.3
Gas	2,063	342,795	1.5
Health care	2,890	467,583	2.1
Non-shopping errand	4,346	702,363	3.2
Socialize	2,952	471,201	2.1
Civic/Religious	1,526	253,277	1.1
Exercise	2,996	469,539	2.1
Recreation	2,003	375,856	1.7
Entertainment	703	116,337	0.5
Drop off/pick up	8,561	1,933,292	8.7
Other	3,187	520,173	2.3
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Origin activity

MPO_O_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	23,497	3,347,440	15.0
At home	35,503	6,692,368	30.0
Work at home	478	89,221	0.4
Work	15,507	2,531,413	11.4
Work-related	2,107	333,268	1.5
Volunteer	1,139	191,876	0.9
Drop off/pick up	7,063	1,656,680	7.4
Attend school	3,592	971,335	4.4
Other school-related	553	131,377	0.6
Childcare	726	172,575	0.8
Adult care	29	5,473	0.0
Shop	11,360	1,926,815	8.6
Meal/coffee or drink	5,066	806,498	3.6
Quick stop food/coffee	3,081	501,336	2.2
Fuel vehicle	1,585	283,898	1.3
Healthcare	2,309	391,225	1.8
Personal services	2,573	414,649	1.9
Entertainment	566	99,627	0.4
Socialize	2,283	383,106	1.7
Recreation	1,563	305,788	1.4
Exercise	2,321	384,882	1.7
Civic/Religious	1,297	222,480	1.0
Postal	861	125,972	0.6
Airport	411	59,470	0.3
Inter-City Train Terminal	31	2,618	0.0
Inter-City Bus Terminal	12	3,335	0.0
Parking Location	48	7,598	0.0
Other Residence/Hotel/Resort	176	34,745	0.2
Other	1,137	206,670	0.9
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

ORIGIN address: State-County FIPS Code Combination

O_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	47	4,498	0.0
Alabama	1	9	0.0
Arizona	3	206	0.0
Arkansas	1	49	0.0
California	49	10,271	0.0
Colorado	10	962	0.0
Connecticut	3	69	0.0
Delaware	53	9,317	0.0
District of Columbia	17,570	2,566,110	11.5
Florida	26	3,528	0.0
Georgia	5	1,632	0.0
Illinois	14	1,911	0.0
Indiana	7	564	0.0
Kentucky	4	522	0.0
Louisiana	4	288	0.0
Allegany County, Maryland	6	877	0.0
Anne Arundel County, Maryland	11,130	1,686,114	7.6
Baltimore County, Maryland	817	105,439	0.5
Calvert County, Maryland	1,343	232,967	1.0
Caroline County, Maryland	6	856	0.0
Carroll County, Maryland	3,767	458,335	2.1
Cecil County, Maryland	6	893	0.0
Charles County, Maryland	2,628	428,585	1.9
Dorchester County, Maryland	12	1,220	0.0
Frederick County, Maryland	4,389	768,021	3.4
Garrett County, Maryland	1	227	0.0
Harford County, Maryland	21	3,229	0.0
Howard County, Maryland	6,293	990,680	4.4
Kent County, Maryland	9	585	0.0
Montgomery County, Maryland	15,955	3,299,044	14.8
Prince George's County, Maryland	11,970	2,270,823	10.2
Queen Anne's County, Maryland	36	3,484	0.0
St. Mary's County, Maryland	1,887	351,230	1.6
Somerset County, Maryland	1	255	0.0
Talbot County, Maryland	14	1,980	0.0
Washington County, Maryland	50	8,353	0.0
Wicomico County, Maryland	10	620	0.0
Worcester County, Maryland	32	2,682	0.0
Baltimore city, Maryland	629	98,039	0.4

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

ORIGIN address: State-County FIPS Code Combination

O_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Massachusetts	5	433	0.0
Michigan	4	349	0.0
Minnesota	5	864	0.0
Montana	1	54	0.0
Nebraska	1	272	0.0
Nevada	2	111	0.0
New Hampshire	8	480	0.0
New Jersey	17	3,980	0.0
New York	36	7,042	0.0
North Carolina	22	3,139	0.0
Ohio	11	1,527	0.0
Oregon	1	115	0.0
Pennsylvania	164	25,555	0.1
South Carolina	7	638	0.0
Texas	3	316	0.0
Utah	1	61	0.0
Accomack County, Virginia	1	177	0.0
Albemarle County, Virginia	6	1,046	0.0
Amherst County, Virginia	2	54	0.0
Arlington County, Virginia	7,395	850,610	3.8
Caroline County, Virginia	13	2,241	0.0
Chesterfield County, Virginia	7	1,332	0.0
Clarke County, Virginia	273	26,907	0.1
Culpeper County, Virginia	13	2,614	0.0
Dinwiddie County, Virginia	1	323	0.0
Fairfax County, Virginia	15,982	3,485,390	15.6
Fauquier County, Virginia	1,109	161,661	0.7
Frederick County, Virginia	49	5,803	0.0
Greene County, Virginia	1	26	0.0
Hanover County, Virginia	7	1,829	0.0
Henrico County, Virginia	18	3,620	0.0
King George County, Virginia	400	72,198	0.3
Lancaster County, Virginia	4	426	0.0
Loudoun County, Virginia	6,745	1,150,970	5.2
Louisa County, Virginia	6	1,492	0.0
Madison County, Virginia	1	92	0.0
Montgomery County, Virginia	1	278	0.0
New Kent County, Virginia	1	49	0.0
Northumberland County, Virginia	3	527	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

ORIGIN address: State-County FIPS Code Combination

O_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Nottoway County, Virginia	1	271	0.0
Orange County, Virginia	10	2,277	0.0
Page County, Virginia	4	479	0.0
Prince George County, Virginia	1	408	0.0
Prince William County, Virginia	5,559	1,286,149	5.8
Rappahannock County, Virginia	2	412	0.0
Roanoke County, Virginia	2	244	0.0
Shenandoah County, Virginia	7	699	0.0
Spotsylvania County, Virginia	1,181	319,416	1.4
Stafford County, Virginia	1,317	341,589	1.5
Warren County, Virginia	13	1,451	0.0
Westmoreland County, Virginia	7	1,818	0.0
York County, Virginia	1	117	0.0
Alexandria city, Virginia	3,562	528,358	2.4
Charlottesville city, Virginia	4	605	0.0
Fairfax city, Virginia	693	112,116	0.5
Falls Church city, Virginia	622	89,131	0.4
Fredericksburg city, Virginia	580	129,946	0.6
Harrisonburg city, Virginia	1	155	0.0
Lexington city, Virginia	2	863	0.0
Lynchburg city, Virginia	2	1,509	0.0
Manassas city, Virginia	1,061	165,853	0.7
Manassas Park city, Virginia	175	33,687	0.2
Newport News city, Virginia	2	144	0.0
Norfolk city, Virginia	8	1,126	0.0
Richmond city, Virginia	16	2,750	0.0
Roanoke city, Virginia	4	384	0.0
Waynesboro city, Virginia	1	135	0.0
Williamsburg city, Virginia	4	533	0.0
Winchester city, Virginia	24	3,858	0.0
Washington	3	176	0.0
West Virginia	5	569	0.0
Berkeley County, West Virginia	47	5,958	0.0
Jefferson County, West Virginia	815	121,068	0.5
Wisconsin	3	409	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Destination purpose

D_PURPOSE	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,152	0.0
Home	43,780	7,910,414	35.5
Work	17,622	2,811,374	12.6
Work-related	2,466	370,160	1.7
Shop	23,617	3,756,528	16.9
Daycare	727	172,478	0.8
School	5,036	1,283,368	5.8
Other	19,894	3,232,583	14.5
Drop Off/Pick Up Someone	8,437	1,917,594	8.6
Parking Point	47	7,456	0.0
Inter-City Rail Terminal	24	2,153	0.0
Inter-City Bus Terminal	9	2,651	0.0
Airport	352	51,593	0.2
Gas/EV Charging Station	1,994	333,108	1.5
External Point	2,858	430,126	1.9
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Destination activity

D_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	11	2,152	0.0
Home	43,601	7,892,223	35.4
Work	21,298	3,361,494	15.1
Volunteer	1,359	218,311	1.0
School	5,121	1,300,187	5.8
Shopping	14,121	2,281,331	10.2
Meal (quick-stop)	3,655	579,693	2.6
Meal	6,271	957,480	4.3
Gas	2,067	342,724	1.5
Health care	2,909	470,959	2.1
Non-shopping errand	4,344	701,638	3.1
Socialize	3,108	500,224	2.2
Civic/Religious	1,526	254,110	1.1
Exercise	2,978	468,756	2.1
Recreation	2,038	381,144	1.7
Entertainment	711	117,259	0.5
Drop off/pick up	8,574	1,938,683	8.7
Other	3,182	515,370	2.3
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Destination activity

MPO_D_ACTIVITY	Record Count	Weighted Total	Percent of Total
Not ascertained	23,497	3,347,440	15.0
At home	34,849	6,583,613	29.5
Work at home	939	172,152	0.8
Work	15,502	2,529,087	11.3
Work-related	2,127	335,329	1.5
Volunteer	1,140	189,850	0.9
Drop off/pick up	7,078	1,662,230	7.5
Attend school	3,602	974,533	4.4
Other school-related	557	132,055	0.6
Childcare	728	172,704	0.8
Adult care	29	5,473	0.0
Shop	11,345	1,924,173	8.6
Meal/coffee or drink	5,062	806,832	3.6
Quick stop food/coffee	3,087	501,634	2.3
Fuel vehicle	1,588	283,785	1.3
Healthcare	2,331	395,073	1.8
Personal services	2,568	413,682	1.9
Entertainment	566	99,728	0.4
Socialize	2,411	407,274	1.8
Recreation	1,589	309,740	1.4
Exercise	2,322	384,987	1.7
Civic/Religious	1,296	223,168	1.0
Postal	858	125,217	0.6
Airport	453	66,907	0.3
Inter-City Train Terminal	36	3,249	0.0
Inter-City Bus Terminal	15	4,993	0.0
Parking Location	47	7,456	0.0
Other Residence/Hotel/Resort	476	80,626	0.4
Other	776	140,748	0.6
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Not Ascertained	69	7,941	0.0
Alabama	2	283	0.0
Arizona	4	322	0.0
California	56	11,202	0.1
Colorado	11	904	0.0
Connecticut	9	2,648	0.0
Delaware	68	10,636	0.0
District of Columbia	17,531	2,557,591	11.5
Florida	36	5,869	0.0
Georgia	9	1,283	0.0
Illinois	10	1,835	0.0
Indiana	9	1,095	0.0
Kansas	4	223	0.0
Louisiana	4	468	0.0
Allegany County, Maryland	6	693	0.0
Anne Arundel County, Maryland	11,080	1,675,779	7.5
Baltimore County, Maryland	832	107,196	0.5
Calvert County, Maryland	1,334	231,666	1.0
Caroline County, Maryland	7	1,047	0.0
Carroll County, Maryland	3,750	454,266	2.0
Cecil County, Maryland	8	862	0.0
Charles County, Maryland	2,617	425,737	1.9
Dorchester County, Maryland	13	1,487	0.0
Frederick County, Maryland	4,375	765,647	3.4
Harford County, Maryland	33	5,017	0.0
Howard County, Maryland	6,282	989,823	4.4
Kent County, Maryland	10	620	0.0
Montgomery County, Maryland	15,961	3,297,252	14.8
Prince George's County, Maryland	11,909	2,263,994	10.2
Queen Anne's County, Maryland	40	4,298	0.0
St. Mary's County, Maryland	1,886	351,693	1.6
Somerset County, Maryland	1	255	0.0
Talbot County, Maryland	17	2,251	0.0
Washington County, Maryland	50	8,003	0.0
Wicomico County, Maryland	11	550	0.0
Worcester County, Maryland	54	4,729	0.0
Baltimore city, Maryland	623	96,590	0.4
Massachusetts	14	884	0.0
Michigan	5	248	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Minnesota	2	202	0.0
Missouri	3	444	0.0
Montana	3	259	0.0
Nebraska	1	145	0.0
Nevada	4	520	0.0
New Hampshire	4	240	0.0
New Jersey	33	7,304	0.0
New Mexico	3	347	0.0
New York	69	13,380	0.1
New York County, New York	1	36	0.0
North Carolina	50	9,216	0.0
Ohio	11	1,580	0.0
Oklahoma	2	943	0.0
Oregon	1	435	0.0
Pennsylvania	200	31,854	0.1
Rhode Island	1	163	0.0
South Carolina	8	1,157	0.0
Tennessee	2	156	0.0
Texas	12	1,642	0.0
Utah	2	403	0.0
Accomack County, Virginia	1	169	0.0
Albemarle County, Virginia	7	1,038	0.0
Alleghany County, Virginia	1	170	0.0
Appomattox County, Virginia	1	48	0.0
Arlington County, Virginia	7,371	849,533	3.8
Augusta County, Virginia	2	190	0.0
Caroline County, Virginia	13	2,118	0.0
Chesterfield County, Virginia	6	1,086	0.0
Clarke County, Virginia	272	26,733	0.1
Culpeper County, Virginia	10	2,049	0.0
Dinwiddie County, Virginia	2	686	0.0
Essex County, Virginia	1	203	0.0
Fairfax County, Virginia	15,959	3,479,734	15.6
Fauquier County, Virginia	1,109	161,860	0.7
Fluvanna County, Virginia	2	305	0.0
Frederick County, Virginia	45	6,481	0.0
Goochland County, Virginia	2	343	0.0
Hanover County, Virginia	12	2,264	0.0
Henrico County, Virginia	29	4,822	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
James City County, Virginia	2	296	0.0
King and Queen County, Virginia	1	120	0.0
King George County, Virginia	401	72,453	0.3
Lancaster County, Virginia	4	426	0.0
Loudoun County, Virginia	6,720	1,147,947	5.2
Louisa County, Virginia	5	879	0.0
Lunenburg County, Virginia	2	128	0.0
Montgomery County, Virginia	1	278	0.0
Nelson County, Virginia	2	248	0.0
New Kent County, Virginia	1	49	0.0
Northumberland County, Virginia	3	162	0.0
Orange County, Virginia	14	2,936	0.0
Page County, Virginia	2	130	0.0
Prince Edward County, Virginia	1	232	0.0
Prince George County, Virginia	1	408	0.0
Prince William County, Virginia	5,545	1,285,335	5.8
Pulaski County, Virginia	3	643	0.0
Rappahannock County, Virginia	3	634	0.0
Roanoke County, Virginia	3	324	0.0
Rockingham County, Virginia	4	1,286	0.0
Shenandoah County, Virginia	9	837	0.0
Spotsylvania County, Virginia	1,175	317,751	1.4
Stafford County, Virginia	1,320	342,488	1.5
Warren County, Virginia	16	1,729	0.0
Westmoreland County, Virginia	7	1,795	0.0
Wythe County, Virginia	1	181	0.0
York County, Virginia	6	2,016	0.0
Alexandria city, Virginia	3,536	524,895	2.4
Charlottesville city, Virginia	5	815	0.0
Colonial Heights city, Virginia	1	94	0.0
Fairfax city, Virginia	699	112,748	0.5
Falls Church city, Virginia	620	88,745	0.4
Fredericksburg city, Virginia	579	130,214	0.6
Hampton city, Virginia	1	111	0.0
Lexington city, Virginia	3	1,246	0.0
Lynchburg city, Virginia	1	869	0.0
Manassas city, Virginia	1,055	164,282	0.7
Manassas Park city, Virginia	175	33,570	0.2
Newport News city, Virginia	4	770	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

DESTINATION address: State-County FIPS Code Combination

D_STATE_COUNTY_FIPS	Record Count	Weighted Total	Percent of Total
Norfolk city, Virginia	9	1,614	0.0
Petersburg city, Virginia	2	400	0.0
Richmond city, Virginia	12	2,352	0.0
Roanoke city, Virginia	5	480	0.0
Virginia Beach city, Virginia	4	1,106	0.0
Waynesboro city, Virginia	1	135	0.0
Williamsburg city, Virginia	2	422	0.0
Winchester city, Virginia	27	4,166	0.0
Washington	2	314	0.0
West Virginia	10	1,297	0.0
Berkeley County, West Virginia	48	6,008	0.0
Jefferson County, West Virginia	820	121,700	0.5
Wisconsin	4	529	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Trip departure time

DEPARTURE_ TIME_HHMM	Record Count	Weighted Total	Percent of Total
00:00-03:59	619	101,938	0.5
04:00-04:59	524	85,047	0.4
05:00-05:29	650	105,121	0.5
05:30-05:59	1,103	185,006	0.8
06:00-06:29	1,721	268,613	1.2
06:30-06:59	2,716	493,902	2.2
07:00-07:29	4,460	825,258	3.7
07:30-07:59	5,097	1,018,214	4.6
08:00-08:29	4,985	940,113	4.2
08:30-08:59	4,719	917,309	4.1
09:00-09:29	3,787	685,524	3.1
09:30-09:59	3,032	510,085	2.3
10:00-10:29	3,073	513,444	2.3
10:30-10:59	2,969	469,861	2.1
11:00-11:59	7,245	1,214,054	5.4
12:00-12:59	8,249	1,324,760	5.9
13:00-13:59	7,443	1,235,993	5.5
14:00-14:59	8,009	1,436,346	6.4
15:00-15:29	4,896	929,493	4.2
15:30-15:59	4,854	920,548	4.1
16:00-16:29	5,368	997,506	4.5
16:30-16:59	5,383	961,906	4.3
17:00-17:29	6,330	1,115,847	5.0
17:30-17:59	5,458	948,760	4.3
18:00-18:29	5,227	923,330	4.1
18:30-18:59	4,120	684,710	3.1
19:00-19:29	3,422	554,844	2.5
19:30-19:59	2,562	416,694	1.9
20:00-20:59	4,346	760,994	3.4
21:00-21:59	2,615	422,619	1.9
22:00-22:59	1,293	215,589	1.0
23:00-23:59	599	100,310	0.5
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Trip arrival time

ARRIVAL_TIME_ HHMM	Record Count	Weighted Total	Percent of Total
00:00-03:59	788	132,438	0.6
04:00-04:59	226	35,617	0.2
05:00-05:29	309	54,324	0.2
05:30-05:59	611	101,002	0.5
06:00-06:29	1,038	179,243	0.8
06:30-06:59	1,723	282,905	1.3
07:00-07:29	3,337	616,702	2.8
07:30-07:59	4,572	895,381	4.0
08:00-08:29	5,201	1,014,565	4.6
08:30-08:59	5,153	996,935	4.5
09:00-09:29	5,012	919,299	4.1
09:30-09:59	3,411	574,924	2.6
10:00-10:29	3,240	530,448	2.4
10:30-10:59	2,957	483,696	2.2
11:00-11:59	6,972	1,156,301	5.2
12:00-12:59	8,246	1,331,588	6.0
13:00-13:59	7,478	1,226,239	5.5
14:00-14:59	7,363	1,287,394	5.8
15:00-15:29	4,377	835,857	3.8
15:30-15:59	4,409	839,201	3.8
16:00-16:29	5,042	994,738	4.5
16:30-16:59	4,883	900,462	4.0
17:00-17:29	5,763	1,024,386	4.6
17:30-17:59	5,808	1,004,747	4.5
18:00-18:29	6,081	1,055,882	4.7
18:30-18:59	5,056	858,321	3.9
19:00-19:29	4,358	704,143	3.2
19:30-19:59	3,136	508,770	2.3
20:00-20:59	4,841	834,620	3.7
21:00-21:59	3,034	505,706	2.3
22:00-22:59	1,615	253,728	1.1
23:00-23:59	834	144,176	0.6
Total	126,874	22,283,738	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Primary travel mode

TRAVEL_MODE	Record Count	Weighted Total	Percent of Total
Walk	11,763	1,746,036	7.8
Bike	1,415	245,360	1.1
Motorcycle	31	3,796	0.0
Auto (driver)	78,127	13,283,372	59.6
Auto (passenger)	22,119	4,927,223	22.1
School Bus	2,980	810,320	3.6
Rail	6,265	652,157	2.9
Bus	2,136	330,066	1.5
Private Bus	245	37,677	0.2
Paratransit	111	19,639	0.1
Taxi / Private Car	254	38,081	0.2
Uber/Lyft/Rideshare	1,024	137,295	0.6
Air	266	38,167	0.2
Other	138	14,549	0.1
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WWM_WTTRDFIN

The SURVEYFREQ Procedure

Primary travel mode

MPO_TRAVEL_MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	23,497	3,347,440	15.0
Drive Alone	46,496	7,964,134	35.7
Drive Others	15,017	3,073,623	13.8
Auto Passenger	17,557	4,182,211	18.8
Subway	5,606	574,378	2.6
Local_Bus	1,823	294,884	1.3
Commuter_Rail	359	50,156	0.2
Express_Commuter_Bus	188	20,290	0.1
Light_Rail	10	1,045	0.0
Shuttle_Bus	204	31,982	0.1
Paratransit	109	19,537	0.1
Ridehailing	975	127,881	0.6
Taxi	240	36,849	0.2
School_Bus	2,364	668,326	3.0
Walk	10,774	1,611,656	7.2
Bike	1,328	233,638	1.0
Intercity_Rail	23	3,010	0.0
Intercity_Bus	15	3,045	0.0
Air	235	33,304	0.1
Other	19	1,770	0.0
Charter Bus	10	1,356	0.0
Motorcycle	25	3,223	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Travel mode used for transit access

TRANSIT_ACCESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	115,820	20,539,709	92.2
Walking	9,586	1,537,244	6.9
Bicycle	79	10,907	0.0
Park and ride	830	99,649	0.4
Kiss and ride	360	73,185	0.3
Taxi / Uber / Lyft	45	6,522	0.0
Some other mode	154	16,522	0.1
Total	126,874	22,283,738	100.0

Travel mode used for transit egress

TRANSIT_EGRESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	115,817	20,539,061	92.2
Walking	9,658	1,554,338	7.0
Bicycle	77	9,294	0.0
Park and ride	722	87,789	0.4
Kiss and ride	363	66,470	0.3
Taxi / Uber / Lyft	85	9,176	0.0
Some other mode	152	17,610	0.1
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Total number of travelers on trip including self (derived)

TRAVELERS_TOTAL	Record Count	Weighted Total	Percent of Total
1	76,184	11,895,103	53.4
2	30,987	5,518,522	24.8
3	10,642	2,377,104	10.7
4	4,363	1,174,491	5.3
5	1,239	413,765	1.9
6	2,402	608,935	2.7
7	731	210,147	0.9
8	174	53,746	0.2
9	45	14,482	0.1
10	6	1,259	0.0
11	29	7,866	0.0
13	3	158	0.0
16	2	76	0.0
17	1	67	0.0
19	2	221	0.0
21	23	2,130	0.0
23	2	294	0.0
25	2	134	0.0
26	10	1,319	0.0
31	11	1,891	0.0
33	2	134	0.0
36	2	134	0.0
41	4	598	0.0
46	6	788	0.0
61	2	374	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WWM_WTTRDFIN

The SURVEYFREQ Procedure

Household members on trip including self (derived)

TRAVELERS_HH	Record Count	Weighted Total	Percent of Total
1 Household member	86,573	13,588,677	61.0
2 Household members	27,839	5,187,563	23.3
3 Household members	8,222	2,028,373	9.1
4 Household members	3,209	1,020,427	4.6
5 Household members	693	291,870	1.3
6 Household members	246	131,942	0.6
7 Household members Household members	76	29,882	0.1
8 or more Household members	16	5,004	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Non-household members on trip

TRAVELERS_NONHH	Record Count	Weighted Total	Percent of Total
0	112,176	19,657,837	88.2
1	8,598	1,392,756	6.3
2	2,332	410,574	1.8
3	679	120,769	0.5
4	300	56,181	0.3
5	2,701	635,260	2.9
6	1	89	0.0
7	2	356	0.0
9	4	860	0.0
10	9	738	0.0
12	3	158	0.0
15	2	76	0.0
16	1	67	0.0
18	2	221	0.0
19	6	356	0.0
20	17	1,774	0.0
22	2	294	0.0
23	2	134	0.0
25	10	1,319	0.0
30	11	1,891	0.0
32	2	134	0.0
34	2	134	0.0
39	2	532	0.0
40	2	66	0.0
45	6	788	0.0
60	2	374	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
 Trip File Tabulations
 Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Trip mode: Household vehicle

MODE_HH_VEHICLE	Record Count	Weighted Total	Percent of Total
Not ascertained	32,116	5,114,791	23.0
Household Vehicle 1	60,223	10,260,260	46.0
Household Vehicle 2	27,945	5,376,375	24.1
Household Vehicle 3	5,247	1,197,638	5.4
Household Vehicle 4	1,056	251,450	1.1
Household Vehicle 5	242	67,681	0.3
Household Vehicle 6	27	9,049	0.0
Household Vehicle 7	18	6,494	0.0
Total	126,874	22,283,738	100.0

Trip mode: Other car, truck, van

MPO_MODE_OTHER_VEHICLE	Record Count	Weighted Total	Percent of Total
Not ascertained	125,640	22,060,383	99.0
Rental vehicle	97	23,259	0.1
Vehicle from work	91	15,176	0.1
Someone else's vehicle	921	160,436	0.7
Carshare vehicle	30	3,933	0.0
Other	95	20,551	0.1
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Vehicle occupancy

VEHICLE_ OCCUPANCY	Record Count	Weighted Total	Percent of Total
Not ascertained	46,380	8,732,971	39.2
1	59,014	9,608,450	43.1
2	15,494	2,654,013	11.9
3	4,077	825,577	3.7
4	1,417	327,234	1.5
5	319	86,347	0.4
6	137	38,196	0.2
7	30	9,426	0.0
8	4	972	0.0
11	2	552	0.0
Total	126,874	22,283,738	100.0

Auto trip: If driver: Parking location at/near destination

PARK_LOC	Record Count	Weighted Total	Percent of Total
Not ascertained	39,675	6,551,003	29.4
Driveway/garage	23,278	4,425,126	19.9
Parking lot/garage	49,066	8,497,024	38.1
On street parking	7,671	1,322,554	5.9
Other	7,184	1,488,031	6.7
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Auto trip: If driver: Parking location at/near destination

MPO_PARK_LOC	Record Count	Weighted Total	Percent of Total
Not ascertained	57,258	9,041,885	40.6
Own driveway/garage	17,487	3,476,993	15.6
Someone else's driveway	1,217	235,701	1.1
Parking lot/garage	38,008	7,018,543	31.5
On street parking	6,549	1,172,311	5.3
Park and ride lot	374	60,798	0.3
Didn't park-waited	5,225	1,156,668	5.2
Other	756	120,839	0.5
Total	126,874	22,283,738	100.0

Auto trip: If driver: If paid for parking on travel date: If parking location was lot/garage, on-street, park/ride: Parking payment method

PARK_PAY	Record Count	Weighted Total	Percent of Total
Not ascertained	119,423	21,154,579	94.9
No	5,291	807,584	3.6
Yes	2,160	321,575	1.4
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Auto trip: If driver: If paid for parking on travel date: If parking location was lot/garage, on-street, park/ride: Parking payment method

MPO_PARK_PAY	Record Count	Weighted Total	Percent of Total
Not ascertained	120,667	21,294,044	95.6
No, parking was free	3,922	642,907	2.9
No, employer paid	254	40,701	0.2
No, paid by store, etc.	71	10,590	0.0
Yes, cash, credit card, ticket	1,691	257,711	1.2
Other	262	36,503	0.2
Don't know	7	1,282	0.0
Total	126,874	22,283,738	100.0

Subway system used on trip

SUBWAY_USED	Record Count	Weighted Total	Percent of Total
Not ascertained	97,678	18,351,375	82.4
No	23,292	3,331,607	15.0
Yes	5,904	600,756	2.7
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WWM_WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: Fare payment method

SUBWAY_PAY	Record Count	Weighted Total	Percent of Total
Not ascertained	120,997	21,685,753	97.3
SmarTrip (regular fare)	4,983	517,250	2.3
CharmCard (regular fare)	5	286	0.0
Single trip fare	17	955	0.0
Round trip fare	8	658	0.0
Monthly pass	232	21,882	0.1
Weekly pass	11	799	0.0
Daily pass	7	343	0.0
Transit Link Card	21	1,874	0.0
Senior/disabled fare	262	20,817	0.1
Youth/student fare	63	4,906	0.0
Don't know	268	28,215	0.1
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant boarded

SUBWAY_STATION_BOARD	Record Count	Weighted Total	Percent of Total
Not ascertained	120,971	21,683,403	97.3
Addison Road	21	2,848	0.0
Anacostia	36	4,093	0.0
Archives	85	6,321	0.0
Arlington Cemetery	1	102	0.0
Ballston - MU	122	10,667	0.0
Benning Road	12	1,151	0.0
Bethesda	102	10,241	0.0
Braddock Road	71	5,698	0.0
Branch Avenue	36	4,164	0.0
Brookland - CUA	49	5,593	0.0
Capitol Heights	17	3,221	0.0
Capitol South	65	6,354	0.0
Cheverly	15	2,035	0.0
Clarendon	49	4,128	0.0
Cleveland Park	48	4,191	0.0
College Park - University of Maryland	35	3,780	0.0
Columbia Heights	95	10,660	0.0
Congress Heights	19	2,588	0.0
Court House	69	6,056	0.0
Crystal City	172	12,284	0.1
Deanwood	11	1,508	0.0
Dunn Loring	41	4,625	0.0
Dupont Circle	171	19,579	0.1
East Falls Church	40	4,134	0.0
Eastern Market	66	6,083	0.0
Eisenhower Avenue	17	1,489	0.0
Farragut North	234	27,168	0.1
Farragut West	202	18,133	0.1
Federal Center SW	62	7,329	0.0
Federal Triangle	71	7,727	0.0
Foggy Bottom - GWU	178	14,199	0.1
Forest Glen	15	1,884	0.0
Franconia - Springfield	27	5,562	0.0
Friendship Heights	65	8,049	0.0
Georgia Avenue - Petworth	58	6,127	0.0
Glenmont	43	7,860	0.0
Greensboro	7	1,383	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant boarded

SUBWAY_STATION_BOARD	Record Count	Weighted Total	Percent of Total
Greenbelt	51	5,568	0.0
Grosvenor - Strathmore	43	4,536	0.0
Huntington	48	6,294	0.0
Judiciary Square	66	6,096	0.0
King Street - Old Town	72	7,263	0.0
Landover	11	1,504	0.0
Largo Town Center	34	5,975	0.0
McLean	13	1,816	0.0
McPherson Square	114	12,434	0.1
Medical Center	44	5,563	0.0
Minnesota Avenue	22	2,021	0.0
Morgan Boulevard	13	1,099	0.0
Mount Vernon Square	22	1,762	0.0
Navy Yard - Ballpark	98	8,849	0.0
Naylor Road	15	983	0.0
New Carrollton	54	5,459	0.0
NoMa - Gallaudet U	75	9,411	0.0
Pentagon	131	15,774	0.1
Pentagon City	206	9,764	0.0
Potomac Avenue	32	3,485	0.0
Prince George's Plaza	58	4,023	0.0
Rhode Island Avenue - Brentwood	39	3,340	0.0
Rockville	35	3,418	0.0
Ronald Reagan Washington National Airport	25	1,512	0.0
Rosslyn	129	11,286	0.1
Shady Grove	96	12,251	0.1
Shaw - Howard University	32	3,069	0.0
Silver Spring	103	10,553	0.0
Smithsonian	55	5,458	0.0
Southern Avenue	27	3,734	0.0
Spring Hill	4	505	0.0
Stadium - Armory	29	2,879	0.0
Suitland	51	5,959	0.0
Takoma	66	6,363	0.0
Tenleytown - AU	47	5,126	0.0
Twinbrook	34	3,282	0.0
Tysons Corner	17	1,998	0.0
U Street	51	5,349	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WWM_WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant boarded

SUBWAY_STATION_BOARD	Record Count	Weighted Total	Percent of Total
Union Station	216	20,455	0.1
Van Dorn Street	24	2,418	0.0
Van Ness - UDC	49	5,991	0.0
Vienna	68	9,322	0.0
Virginia Square - GMU	50	3,700	0.0
Waterfront	38	3,698	0.0
West Falls Church	13	1,967	0.0
West Hyattsville	37	2,568	0.0
Wheaton	34	3,956	0.0
White Flint	34	4,038	0.0
Wiehle - Reston East	54	6,798	0.0
Woodley Park	43	4,560	0.0
Owings Mills	8	686	0.0
Lexington Market	3	239	0.0
Charles Center	1	33	0.0
Johns Hopkins Hospital	6	599	0.0
Fort Totten	57	6,338	0.0
Gallery Place	195	20,019	0.1
L'Enfant Plaza	235	21,056	0.1
Metro Center	218	24,866	0.1
Bowie State	4	334	0.0
BWI Airport Rail Station	2	196	0.0
Camden Station	2	310	0.0
Dorsey	6	530	0.0
Halethorpe	1	122	0.0
Odenton	14	606	0.0
Savage	1	8	0.0
West Baltimore	1	147	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Travel mode used for subway access

SUBWAY_ACCESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	120,528	21,569,215	96.8
Walk	5,295	589,085	2.6
Bike	60	6,793	0.0
Auto (driver)	590	70,601	0.3
Auto (passenger)	200	27,631	0.1
Other	201	20,413	0.1
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant exited

SUBWAY_STATION_EXIT	Record Count	Weighted Total	Percent of Total
Not ascertained	120,972	21,683,398	97.3
Addison Road	23	2,960	0.0
Anacostia	43	4,421	0.0
Archives	80	6,645	0.0
Arlington Cemetery	1	102	0.0
Ballston - MU	117	10,410	0.0
Benning Road	19	3,455	0.0
Bethesda	101	11,276	0.1
Braddock Road	62	5,202	0.0
Branch Avenue	33	3,675	0.0
Brookland - CUA	46	4,870	0.0
Capitol Heights	14	2,132	0.0
Capitol South	63	6,458	0.0
Cheverly	13	1,749	0.0
Clarendon	53	5,076	0.0
Cleveland Park	52	4,424	0.0
College Park - University of Maryland	33	2,997	0.0
Columbia Heights	89	9,807	0.0
Congress Heights	15	1,920	0.0
Court House	69	6,365	0.0
Crystal City	180	13,079	0.1
Deanwood	10	1,307	0.0
Dunn Loring	40	4,509	0.0
Dupont Circle	153	17,203	0.1
East Falls Church	41	4,574	0.0
Eastern Market	66	6,274	0.0
Eisenhower Avenue	17	1,584	0.0
Farragut North	235	27,030	0.1
Farragut West	203	18,213	0.1
Federal Center SW	70	8,397	0.0
Federal Triangle	82	8,886	0.0
Foggy Bottom - GWU	195	16,062	0.1
Forest Glen	15	1,983	0.0
Franconia - Springfield	29	5,784	0.0
Friendship Heights	69	8,757	0.0
Georgia Avenue - Petworth	48	4,731	0.0
Glenmont	44	7,208	0.0
Greensboro	7	1,398	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant exited

SUBWAY_STATION_EXIT	Record Count	Weighted Total	Percent of Total
Greenbelt	51	5,220	0.0
Grosvenor - Strathmore	40	4,284	0.0
Huntington	54	6,652	0.0
Judiciary Square	78	8,016	0.0
King Street - Old Town	78	7,908	0.0
Landover	10	1,286	0.0
Largo Town Center	30	5,427	0.0
McLean	10	1,469	0.0
McPherson Square	136	14,550	0.1
Medical Center	47	5,499	0.0
Minnesota Avenue	20	1,840	0.0
Morgan Boulevard	14	1,213	0.0
Mount Vernon Square	26	2,397	0.0
Navy Yard - Ballpark	104	10,055	0.0
Naylor Road	16	952	0.0
New Carrollton	50	4,739	0.0
NoMa - Gallaudet U	69	8,138	0.0
Pentagon	118	13,878	0.1
Pentagon City	194	9,384	0.0
Potomac Avenue	33	3,487	0.0
Prince George's Plaza	57	4,612	0.0
Rhode Island Avenue - Brentwood	37	3,677	0.0
Rockville	33	2,786	0.0
Ronald Reagan Washington National Airport	36	3,054	0.0
Rosslyn	122	10,243	0.0
Shady Grove	100	12,140	0.1
Shaw - Howard University	33	3,079	0.0
Silver Spring	91	10,393	0.0
Smithsonian	58	5,855	0.0
Southern Avenue	30	3,773	0.0
Spring Hill	3	419	0.0
Stadium - Armory	25	2,800	0.0
Suitland	47	5,086	0.0
Takoma	65	6,271	0.0
Tenleytown - AU	47	5,942	0.0
Twinbrook	37	3,311	0.0
Tysons Corner	22	2,498	0.0
U Street	43	4,118	0.0

TPB Modeled Area
Trip File Tabulations
Weighted with WWM_WTTRDFIN

The SURVEYFREQ Procedure

Subway trip: If used Washington Metrorail or Baltimore
Metro: Subway station where participant exited

SUBWAY_STATION_EXIT	Record Count	Weighted Total	Percent of Total
Union Station	210	19,960	0.1
Van Dorn Street	21	2,125	0.0
Van Ness - UDC	56	6,064	0.0
Vienna	68	8,742	0.0
Virginia Square - GMU	52	3,729	0.0
Waterfront	36	3,099	0.0
West Falls Church	13	1,840	0.0
West Hyattsville	33	2,431	0.0
Wheaton	34	3,661	0.0
White Flint	35	4,713	0.0
Wiehle - Reston East	54	6,634	0.0
Woodley Park	39	4,171	0.0
Owings Mills	7	479	0.0
Lexington Market	4	333	0.0
Charles Center	1	33	0.0
Johns Hopkins Hospital	5	658	0.0
Fort Totten	60	6,310	0.0
Gallery Place	190	19,802	0.1
L'Enfant Plaza	229	20,392	0.1
Metro Center	230	25,422	0.1
Bowie State	3	262	0.0
BWI Airport Rail Station	3	345	0.0
Camden Station	1	75	0.0
Dorsey	4	447	0.0
Halethorpe	1	122	0.0
Kensington	1	48	0.0
Odenton	10	402	0.0
Pennsylvania Station	3	362	0.0
Riverdale	1	28	0.0
Savage	2	36	0.0
West Baltimore	2	241	0.0
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Travel mode used for subway egress

SUBWAY_EGRESS_ MODE	Record Count	Weighted Total	Percent of Total
Not ascertained	120,528	21,569,215	96.8
Walk	5,335	593,661	2.7
Bike	59	6,494	0.0
Auto (driver)	486	58,644	0.3
Auto (passenger)	237	32,145	0.1
Other	229	23,579	0.1
Total	126,874	22,283,738	100.0

Auto trip: HOV lane used on trip

HOV_USED	Record Count	Weighted Total	Percent of Total
Not ascertained	126,275	22,167,844	99.5
Yes	599	115,894	0.5
Total	126,874	22,283,738	100.0

Auto trip: HOT lane, toll road, toll bridge, or ferry used on trip

TOLL_ROAD_USED	Record Count	Weighted Total	Percent of Total
Not ascertained	125,001	21,941,378	98.5
Yes	1,873	342,360	1.5
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Driving distance (miles) from origin to destination (Google estimate) (derived)

DISTANCE	Record Count	Weighted Total	Percent of Total
Not ascertained	1	143	0.0
< 0.1	2,536	384,570	1.7
0.1 - 0.49	13,314	2,191,278	9.8
0.5 - 0.99	12,537	2,244,164	10.1
1.0 - 1.49	9,593	1,727,879	7.8
0.5 - 1.99	8,366	1,526,881	6.9
2.0 - 2.49	7,258	1,337,468	6.0
2.5 - 2.99	6,211	1,122,273	5.0
3.0 - 3.99	9,897	1,817,003	8.2
4.0 - 4.99	7,699	1,422,044	6.4
5.0 - 6.99	11,115	2,023,494	9.1
7.0 - 9.99	11,168	1,999,743	9.0
10.0 - 14.9	9,870	1,695,459	7.6
15.0 - 19.9	5,742	986,961	4.4
20.0 - 24.9	3,728	588,528	2.6
25.0 - 29.9	2,414	374,806	1.7
30.0 - 39.9	2,593	405,332	1.8
40.0 - 49.9	1,023	152,341	0.7
50.0 - 59.9	590	85,334	0.4
60.0 - 69.9	255	42,747	0.2
70.0 - 79.9	136	22,859	0.1
80.0 - 89.9	80	11,168	0.1
90.0 - 99.9	66	10,914	0.0
100.0-129.9	135	21,882	0.1
130.0-159.9	86	12,939	0.1
160.0-189.9	42	7,724	0.0
190.0+	419	67,804	0.3
Total	126,874	22,283,738	100.0

TPB Modeled Area
Trip File Tabulations
Weighted with WMM_WTTRDFIN

The SURVEYFREQ Procedure

Trip duration: minutes (reported) (derived)

REPORTED_ TRAVEL_TIME	Record Count	Weighted Total	Percent of Total
Not ascertained	8	513	0.0
0-5	21,924	3,905,691	17.5
6-10	24,318	4,280,612	19.2
11-15	21,182	3,914,310	17.6
16-20	12,754	2,349,042	10.5
21-25	8,317	1,526,179	6.8
26-30	10,795	1,935,762	8.7
31-35	4,645	756,785	3.4
36-40	4,128	671,325	3.0
41-45	4,488	715,408	3.2
46-50	2,290	368,871	1.7
51-55	1,516	235,447	1.1
56-60	2,730	418,789	1.9
61-65	1,062	159,311	0.7
66-70	993	152,601	0.7
71-75	1,132	173,406	0.8
76-80	650	98,699	0.4
81-85	440	71,333	0.3
86-90	770	122,346	0.5
91-95	294	40,570	0.2
96-100	250	40,096	0.2
101-130	1,032	155,490	0.7
131-160	367	50,343	0.2
161-190	209	37,161	0.2
> 190	580	103,648	0.5
Total	126,874	22,283,738	100.0