REGIONAL
TRAVEL SURVEY

Planning Our Future Together

2017-2018 REGIONAL TRAVEL SURVEY UPDATE

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National Capital Region
Transportation Planning Board

Purpose of a Household Travel Survey

- Household travel surveys provide a critical input for the regional transportation planning process used by many MPOs

  - Input for travel demand models to forecast future travel patterns and vehicle emissions

  - Used by MPO member governments and agencies to inform transportation studies and support other planning activities

- Household travel surveys typically require participating households to complete a travel diary that accounts for all trips made by household members in a given time period (e.g., one day)

- Household travel surveys provide a wealth of information about individual travel behavior, including trip purpose, mode choice, trip distance, and trip duration

Regional Travel Survey Overview

- TPB has conducted a regional household travel survey approximately every ten years since 1968 (last HTS was in 2007-2008 which covered 11,000 households)

- Collect demographic and travel information from a representative sample of households in the greater Washington, DC region (TPB model region)

- Primary source of observed data for model estimation, validation, and calibration (both for current trip-based model and future next-generation model)

- Data used for addressing regional growth and transportation planning issues

Survey Design and Methodology (1)

- Main survey of 16,000 households within the TPB modeled region during October 2017-December 2018

- An 800 household pretest was conducted in February-April 2017

- Survey consisted of a recruitment questionnaire (Part 1) and a one-day travel diary (Part 2)

- Recruitment by mail through invitation letters and reminder postcards with a participation incentive

- Households were randomly selected based on address-based samples drawn quarterly

- Survey was primarily web-based with a telephone option

- Survey was designed to ensure the collection of a sufficient number of transit, walk, and bike trips

Survey Design and Methodology (2)

- The RTS covered 22 major jurisdictions and 111 geographic strata (PUMAs/Activity Centers)

- 11 TPB member jurisdictions (including Fauquier)

- Coordinated with Maryland Travel Survey for 3 jurisdictions (Anne Arundel, Howard, Carroll)

- Arlington County Activity Center add-on survey

- Hispanic/Latino outreach effort
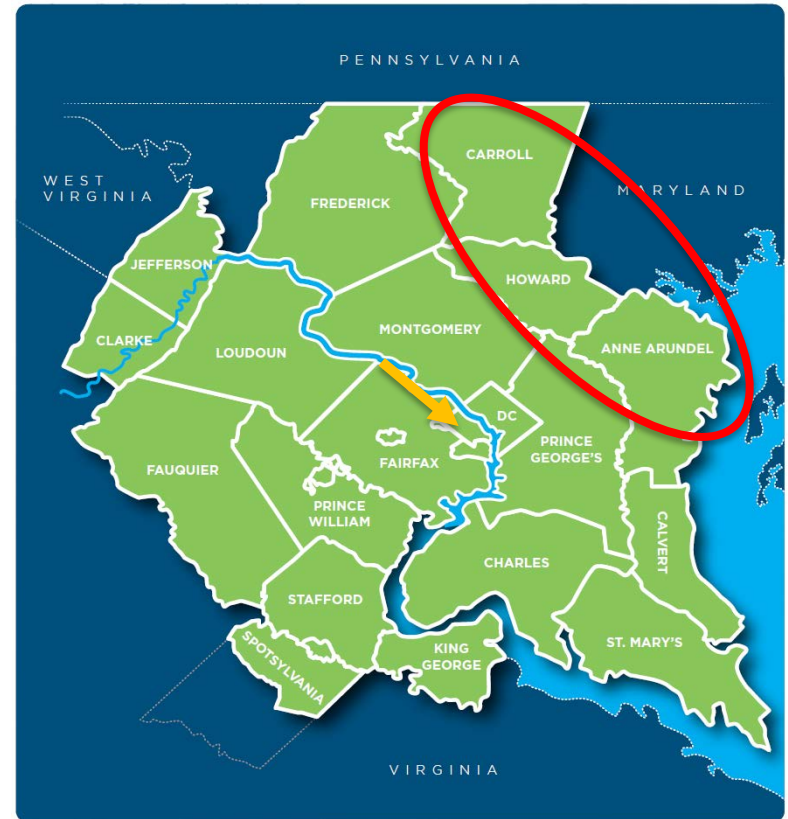
TPB Modeled Area

Key Questions/Data Items in the RTS

- The RTS questions/data items were developed by the COG/TPB survey team with input from travel forecasting and models development staff

- 2007 HTS questionnaire was reviewed to determine which questions to keep or drop for the 2017 RTS

- New questions/data items for the 2017 survey include:
  - Peak period HOV use
  - HOT (Express/Managed Lane) and toll road use
  - Ride-hailing (e.g., Uber, Lyft)
  - Carshare and bikeshare use
  - Types of transit passes used
  - Type of toll transponder in vehicle

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Regional Travel Survey vs. State of the Commute Survey

- The State of the Commute (SOC) Survey analyzes commute trends and attitudes to evaluate the effectiveness of COG/TPB's commuter services programs

- The Regional Travel Survey (RTS) analyzes detailed household and person trips to develop COG/TPB's regional travel demand forecasting model

- Both the SOC and the RTS are random sample surveys that use an address based sampling methodology

  - RTS captures all trips (both work and non-work trips)

  - SOC Survey focuses on commute trips and modes only

Differences between RTS and SOC Surveys

	Regional Travel Survey (2017-2018)	State of the Commute Survey (2019)
Frequency	Every 10 years	Every 3 years
Duration	15 months	3 months
Sampling Frame	Households and individuals	Employed persons
Sample Size	15,976	Over 7,000 for 2019 and in 2016 it was 5,903
Recruitment	Mail using address based sampling	
Methodology	Internet with phone option	
Geographic Coverage	TPB Modeled Area	Non-Attainment Region
Primary Data of Interest	Detailed trips and typical weekday travel	Commute patterns and commuter opinions

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Recruitment and Completion Rates

- There were 23,011 recruited households who completed the Part 1 survey

- There were 15,976 households who completed the travel diary (Part 2 survey), exceeding the survey goal of 15,000 completed household travel diaries.

- The conversion rate (% of recruited HHs who completed the survey) is 70%

- There were 122,261 completed trips and 45,030 vehicles recorded in the travel diary (Part 2 survey)

Completes by Survey Strata through 12/31/18

Jurisdictional Strata	Overall Target	Completes thru 12-31-2018	Percent Completed
1 District of Columbia	2,012	2,096	104%
2 Arlington County	800	814	102%
3 City of Alexandria	600	629	105%
4 Montgomery County – In	1,200	1,199	100%
5 Montgomery County - Out	1,004	1,031	103%
6 Prince George's County – In	800	831	104%
7 Prince George's County – Out	1,204	1,265	105%
8 Fairfax County/Cities - In	1,004	1,028	102%
9 Fairfax County/Cities - Out	1,204	1,263	105%
10 Loudoun County – In	204	279	137%
11 Loudoun County – Out	600	631	105%
12 Prince William County/Cities - In	400	393	98%
13 Prince William County/Cities - Out	604	646	107%
14 Fauquier County	200	198	99%
15 Frederick County – In	200	199	100%
16 Frederick County – Out	404	435	108%
17 Charles County – In	100	104	104%
18 Charles County – Out	300	306	102%
Non-TPB Jurisdictions	2,208	2,629	119%
Total	15,048	15,976	106%

Survey has exceeded target goal of completes and all strata targets have been met

"In" = Activity Centers; "Out" = Outside of Activity Centers

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Looking Ahead: Survey Schedule

- RTS data collection concluded on December 31, 2018

- Post-survey processing (e.g., data cleaning, factoring, weighting) started in January 2019 and will continue through 2019 (FY 2020)

- Public release dataset anticipated in FY 2020

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