

REGIONAL TRAVEL SURVEY



Planning Our Future Together

2017-2018 REGIONAL TRAVEL SURVEY UPDATE

Kenneth Joh, Ph.D., AICP
TPB Transportation Planner

Transportation Planning Board
May 15, 2019



Purpose of a Household Travel Survey

- Household travel surveys provide a critical input for the regional transportation planning process
 - Input for travel demand models to forecast future travel patterns and vehicle emissions
 - Inform regional and sub-regional 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 demographics and 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
- Primary source of observed data for model estimation, validation, and calibration
- Data used for addressing regional growth and transportation planning issues

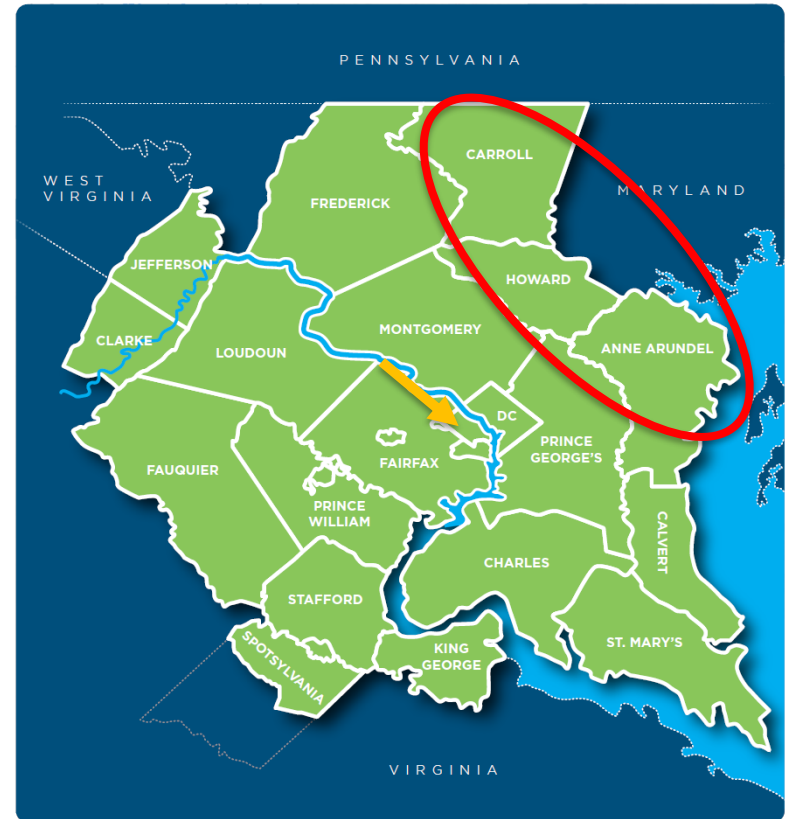


Survey Design and Methodology (1)

- Main survey of 16,000 households within the TPB modeled region during 2017-2018
- A pretest was conducted in early 2017
- Survey consisted of a recruitment questionnaire (Part 1) and a one-day travel diary (Part 2)
- Recruitment by mail through letters and reminder postcards with a participation incentive
- Households were randomly selected to ensure a representative sample
- Survey was primarily web-based

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 COG/TPB staff
- 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



Recruitment and Completion Rates

- About 23,000 households completed the recruitment questionnaire (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.
- 70% of recruited households completed the 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

Looking Ahead: Survey Schedule

- Data cleaning, factoring, and weighting underway
- Public release dataset anticipated in FY 2020



Kenneth Joh, Ph.D., AICP

Senior Statistical Survey Analyst
Department of Transportation Planning
202.962.3276
kjoh@mwkog.org

mwkog.org/tpb

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



National Capital Region
Transportation Planning Board

REGIONAL
TRAVEL SURVEY



Planning Our Future Together