

2017-2018 REGIONAL TRAVEL SURVEY UPDATE

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

TPB Technical Committee October 4, 2019



Regional Travel Survey vs. State of the Commute Survey

COG's Department of Transportation Planning conducts two random sample surveys focused on trips. Both use an address based sampling methodology.



Once a decade comprehensive survey of all types of trips (both work and non-work trips). Analyzes detailed household and person trips to develop COG/TPB's regional travel demand forecasting model.



Triennial survey focused on commute trips. Analyzes commute patterns and attitudes to evaluate the effectiveness of COG/TPB's commuter services programs.







Preliminary Findings of Select Indicators



Presentation Outline

- Overview of Regional Travel Survey (RTS) files
- Preliminary findings of select indicators from the RTS
- Next steps
- Request for input for future tabulations



Overview of Regional Travel Survey Files

Household File

Household

- Size
- Income
- Number of licensed drivers
- Number of workers
- Number of students

Housing

- Type
- Tenure

Vehicles and Bicycles

- Number of vehicles
- · lumber of bicycles

Person File

Demographics

- Race/Ethnicity
- Age
- Gender
- Number of jobs
- Work from home

Typical Commute

- Usual mode
- Frequency of telework
- Work location
- Employer incentives

All Weekday Travel (including work trips)

- Frequency of travel option
- Use of other modes
- Delivery services

Vehicle File

Vehicle Characteristics

- Make and model
- Year
- Fuel type
- Type of toll transponder

Trip File

Trip Details

- Origin and destination
- Start and end times
- · Mode of travel
- Purpose/activities
- Transit access and egress



Household Size (%)

	1 Person	2 Persons	3 Persons	4 Persons	5+ Persons
Core	40.0	31.0	13.7	8.9	6.5
Inner Suburb	23.2	29.6	18.3	15.8	13.2
Outer Suburb	18.2	29.5	18.1	17.9	16.4
TPB Region	26.1	29.9	17.2	14.6	12.3



Household Income (%)

	Less than 25K	25K- 50K	50K- 75K	75K- 100K	100K- 150K	150K- 200K	More than 200K	Prefer not to answer
Core	7.6	7.6	10.1	12.5	19.5	12.8	16.8	13.1
Inner Suburb	4.7	7.8	10.2	12.1	21.0	12.4	14.0	17.9
Outer Suburb	3.1	7.3	10.1	12.4	22.1	14.8	13.2	17.0
TPB Region	5.0	7.6	10.2	12.2	20.9	13.0	14.5	16.6



Workers per Household (%)

	No Worker	1 Worker/HH	2+ Worker/HH	
Core	16.3	44.2	39.6	
Inner Suburb	18.1	35.7	46.2	
Outer Suburb	16.7	34.2	49.1	
TPB Region	17.4	37.4	45.3	



Number of Vehicles (%)

	No Vehicle	1 Vehicle	2 Vehicles	3+ Vehicles	
Core	24.5	49.6	21.8	4.1	
Inner Suburb	4.4	32.5	43.4	19.8	
Outer Suburb	1.2	21.4	45.4	32.1	
TPB Region	8.5	34.1	38.7	18.7	



Delivery Services to Home on Weekdays (%)

Person File

	Package	Food	Service	Any Type
Core	28.6	4.1	6.4	34.3
Inner Suburb	28.1	3.7	6.6	34.0
Outer Suburb	24.6	2.2	5.6	29.5
TPB Region	27.5	3.5	6.3	33.1





Year and Fuel Type

Vehicle File

Year	%	Fuel Type	%
1980 or older	0.5	Gas	92.0
1981-1990	0.6	Diesel	1.2
1991-2000	6.8	Plug-In Hybrid	0.5
2001-2005	16.1	Hybrid	5.1
2006-2010	24.8	Electric	0.4
2011-2015	34.7	Flex Fuel	0.7
2016 and newer	16.5	Other	0.1



Toll Transponders (%)

Vehicle File

	E-ZPass	E-ZPass Flex	Other Transponder	No Transponder	
Core	47.7	11.2	0.6	40.5	
Inner Suburb	45.5	10.5	0.5	43.5	
Outer Suburb	37.6	15.0	0.4	46.9	
TPB Region	43.6	11.9	0.5	44.0	







Frequency of Travel Options (%)

Person File

Travel Option	3-5 days a week	1-2 days a week	A few days per month	A few days per year	Weekends only	Never
Carpool or vanpool to work on weekdays	6.9	2.2	1.6	2.7	N/A	86.6
HOV lane (weekday peak travel)	4.4	2.4	4.2	8.8	N/A	80.3
HOT lane/toll road/toll bridge on weekdays	4.9	2.9	6.2	10.8	N/A	75.2
Carshare	0.2	0.3	0.7	1.8	0.6	96.4
Ride-hailing	2.2	3.5	9.4	15.9	4.4	64.6
Bicycle and bikeshare	4.1	2.2	2.6	4.0	3.7	83.3
Public transit	22.2	4.2	8.0	18.4	2.6	44.5



Looking Ahead: Next Steps

- Post-survey processing (e.g., data cleaning, trip linking, and factoring weights) will continue through 2019
- Review and assess the trip file for reasonableness:
 - Compare weekday travel and daily trip making with independent estimates of regional VMT and daily transit ridership statistics
 - Review trip generation rates
- Final weighted file and documentation for the TPB modeled area anticipated by the end of FY 2020



Seeking Your Input

Household File

Household

- Size
- Income
- Number of licensed drivers
- Number of workers
- Number of students

<u>Housing</u>

- Type
- Tenure

Vehicles and Bicycles

- Number of vehicles
- Number of bicycles

Person File

Demographics

- Race/Ethnicity
- Age
- Gender
- Number of jobs
- Work from home

Typical Commute

- Usual mode
- Frequency of telework
- Work location
- Employer incentives

All Weekday Travel (including work trips)

- Frequency of travel option
- Use of other modes
- Delivery services

Vehicle File

Vehicle Characteristics

- Make and model
- Year
- Fuel type
- Type of toll transponder

Trip File

Trip Details

- Origin and destination
- Start and end times
- Mode of travel
- Purpose/activities
- Transit access and egress
- What questions are you hoping the RTS can help answer?
- Your feedback will influence our future tabulation plans



Kenneth Joh, Ph.D., AICP

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

mwcog.org/tpb

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



