

REGIONAL TRAVEL SURVEY



Planning Our Future Together

2017-2018 REGIONAL HOUSEHOLD TRAVEL SURVEY

Ken Joh, Ph.D., AICP
Senior Statistical Survey Analyst
Department of Transportation Planning

Regional Public Transportation Subcommittee
November 22, 2016



Presentation Outline

- Purpose of regional household travel survey
- Survey design and sampling plan
- Survey questionnaire and other materials
- How transit surveys can supplement the regional household travel survey
- Updated survey schedule
- Next steps and next report to RPTS



Purpose of Regional Household Travel Survey

- Collect empirical data on regional travel behavior from individual persons and households
- Primary source of observed data for model estimation, validation, and calibration (both for current trip-based model and future activity-based model)
- Data used for addressing regional growth and transportation planning issues
- Typically performed every ten years (last regional HTS 2007-2008, covered 11,000 households)
- Largest single discrete project (on cost basis) in UPWP
- 2017-2018 regional HTS will cover 15,000 households



2017-2018 Regional Travel Survey

- Official name of the COG/TPB Household Travel Survey: **Regional Travel Survey (RTS)**
- COG/TPB team: Ken Joh (Project Manager), Bob Griffiths (Senior Advisor), Rich Roisman (Program Manager), Ron Milone (Lead Modeler)
- Survey contractor: Resource Systems Group, Inc. (RSG)
- RSG has used a web-based survey retrieval system and survey smartphone app for other recent HTS efforts
 - rSurvey: web-based retrieval system
 - rMove: survey smartphone app



Survey Design

- Main survey of 15,000 households within the TPB modeled region during a 12-month data collection period
- An 800 household pretest (including a 400 household smartphone GPS component) to be completed over a two week period
- Survey will collect detailed information on socio-economic characteristics and travel behavior from a representative sample of all households in the region



Survey Design

- Survey will consist of a one-day household travel diary and a GPS component
- Address-based sample using USPS delivery sequence file of residential addresses
- Multimode data collection that includes web-based and telephone retrieval
- Utilization of smartphone-based GPS data collection (rMove)



Survey Sampling Plan

- Sampling frame will be stratified into approximately 50-60 geographic strata in the TPB modeled area
- Specified minimum number of completed household interviews obtained in each geographic and area type stratum

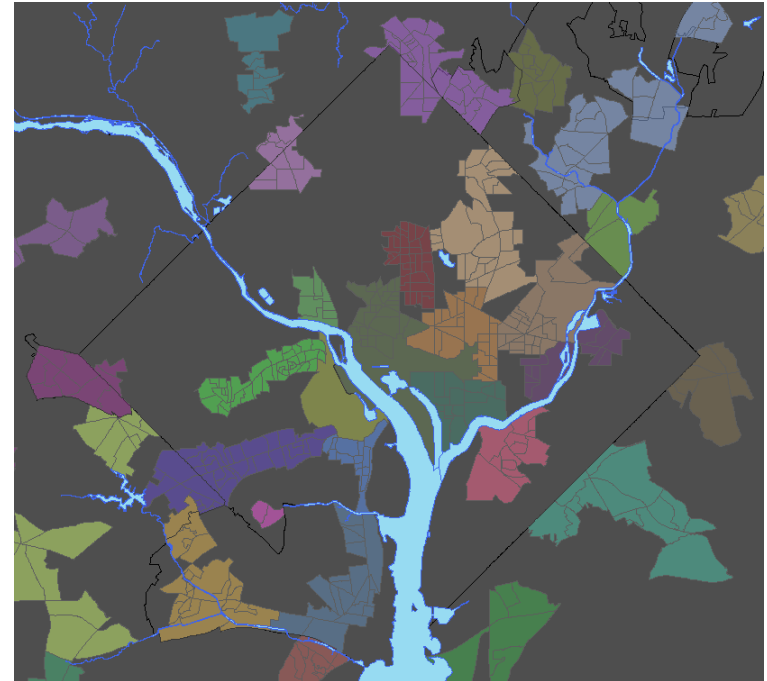


TPB Modeled Area



Survey Sampling Plan

- Sampled areas will include higher density/mixed-use regional activity clusters and lower-density residential areas
- Oversampling of higher density and mixed-use areas with good access to the region's transit network and supportive of daily walk and bicycle travel
- Special outreach efforts will be made to hard to reach households (e.g., lower income and racial/ethnic minority households)



Higher Density/Mixed Use Regional Activity Clusters

Survey Questionnaire and Other Materials

- COG/TPB staff met with the survey contractor (RSG) to discuss and finalize the variable list
- 2007 HTS variables from the recruit and retrieval surveys were reviewed to determine which variables to keep or drop for the 2017 RTS
- Key new variables for the 2017 survey include:
 - HOV and Express/Managed Lane use
 - Uber, Lyft, and Capital Bikeshare use
 - Types of transit passes used
 - Toll transponder in vehicle



Survey Questionnaire and Other Materials

- Based on the selected variables, COG/TPB staff has reviewed the draft questionnaire and survey script for the recruitment and retrieval parts of the survey
- COG/TPB staff has also obtained permission from the following transportation agencies to use their logos on RTS materials including the recruitment letter and the survey website:
 - VDOT, MDOT, WMATA, DRPT (approved)
 - DDOT (pending)



How Transit Surveys can Supplement the RTS

- The 2017 RTS will provide insights on multimodal transit travel by asking questions about access modes, egress modes, and integration of walk/bike and transit combinations and transfers (e.g., bus-to-rail, bike-to-rail, etc.)
- Given the broad scope and sample size of the RTS, transit travel pertaining to specific transit operators (particularly local transit agencies) will not likely be captured
- Transit surveys conducted during the 2017-18 RTS survey period can help fill this important gap



How Transit Surveys can Supplement the RTS

- Transit surveys can provide more detailed information on public transit travel that could be supplemented with the regional household travel survey
- Opportunities should be identified to integrate the RTS with current or planned on-board transit travel surveys



Please take a minute to help us in planning for your transit needs by completing this survey questionnaire. Return the questionnaire in the box you find near the exit gates or simply drop it in a mailbox, no stamp necessary.

Please fill out this survey card each time you receive one.

REGISTER TO WIN ONE OF TWENTY \$100 SMARTRIP CARDS WHEN YOU ANSWER ALL QUESTIONS!

To complete this survey online visit <http://www.wmata.com/traveltrends>
You will need the serial number at the bottom of this survey to complete online.

Para completar esta encuesta en español en línea, por favor visite <http://www.wmata.com/traveltrends>. Usted necesitará el número de serie que aparece en esta encuesta para llenar la encuesta en línea.



Updated Survey Schedule

- Some items still subject to adjustment
- Survey pre-test: early February 2017
 - Following election and major holidays
- Main survey: June 2017
 - Following WMATA SafeTrack surges (Surges 12-15 revised schedule expected in December)
- Complete main survey: late Spring 2018
- All deliverables by end of 2018



Next Steps and Next Report to RPTS

- Finalize sampling plan and procure address-based sample
- Prepare print materials for pretest (recruitment mailings, questionnaires)
- Test latest version of rMove
- Develop project website and mail schedule
- Next report to RPTS: TBD



Ken Joh

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