

2017-2018 REGIONAL HOUSEHOLD TRAVEL SURVEY

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Presentation Outline

- Purpose of regional household travel survey
- Survey design and sampling plan
- Survey questionnaire and other materials
- Bicycle and pedestrian travel in survey
- Updated survey schedule
- Next steps



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





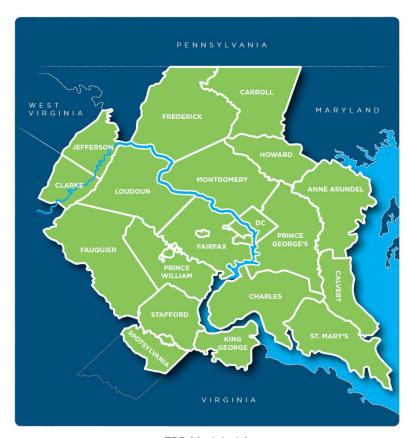
Survey Design

- 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 stratified into 66 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, DDOT



Bicycle and Pedestrian Travel in Survey

- 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., bike-to-rail)
- The 2017 RTS will also capture membership and frequency of Capital Bikeshare use



(Mariordo59/Flickr)



Bicycle and Pedestrian Travel in Survey

Bicycle/Pedestrian Travel	2007 vs. 2017 variables
No. of bicycles in household	Same as 2007
Typical bicycle use per week	Same as 2007
Cash or other incentives for biking or walking to work	Same as 2007
Secure bicycle parking facility at work	Same as 2007
Non-work/recreational walking trips	Same as 2007
Typical bike share use per week	New for 2017
For transit trips, access/egress mode (including walk/bike trips)	New for 2017



Updated Survey Schedule

- Some items still subject to adjustment
- Survey pre-test: February 2017
 - 4 weeks of travel dates
- Analysis of pre-test results and survey refinement: Spring 2017
- Main survey: July 2017
 - WMATA SafeTrack Surges 15 and 16
 May and June 2017 (specific dates TBD)
 - 12 months of travel dates
- Complete main survey: early Summer 2018
- All deliverables by end of 2018



Next Steps

- Prepare for pre-test (recruitment mailings, survey questionnaire)
- Test latest version of rMove
- Finalize project website and mail schedule
- Launch survey pre-test



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