

# 2017-2018 REGIONAL HOUSEHOLD TRAVEL SURVEY

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## Status Report

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Travel Forecasting Subcommittee  
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# Presentation Outline

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- Purpose of regional household travel survey
- Survey design
- Scope of work
- Anticipated survey schedule
- Current project status
- Next steps and next report to TFS



# Purpose of Regional Household Travel Survey

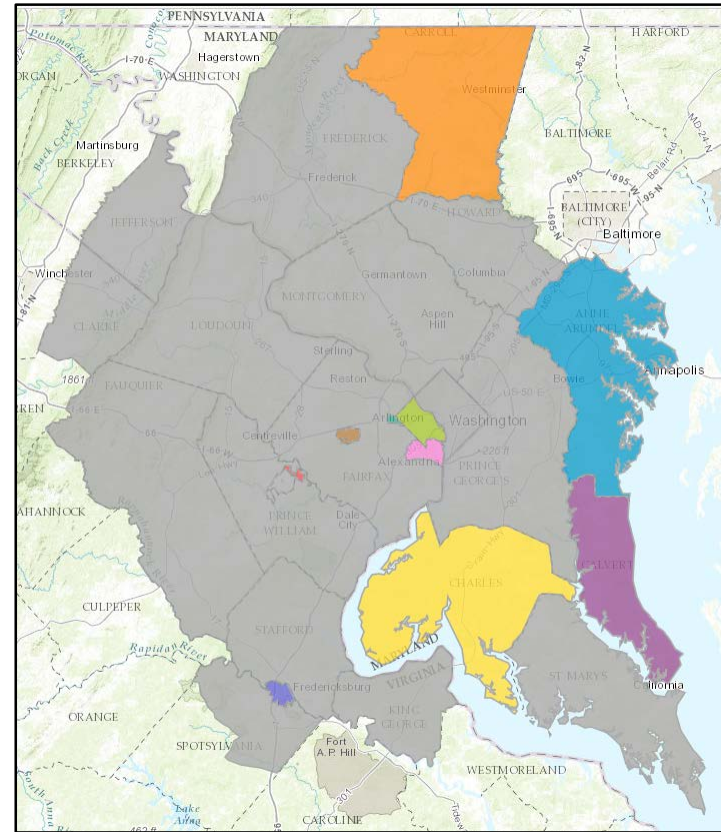
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- Collect empirical data on regional travel behavior from individual persons and households
- Primary source of observed data for model estimation, validation, and calibration (both for current trip-based model and future activity-based model)
- Data 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



# Survey Design (1)

- Collect detailed information on socio-economic characteristics from a representative sample of all persons residing in households in the TPB modeled area
- Complete survey, sampling 15,000 households stratified by jurisdiction and regional activity clusters (RACs) within larger suburban jurisdictions
  - Specified minimum number of completed household interviews obtained in each geographic and area type stratum

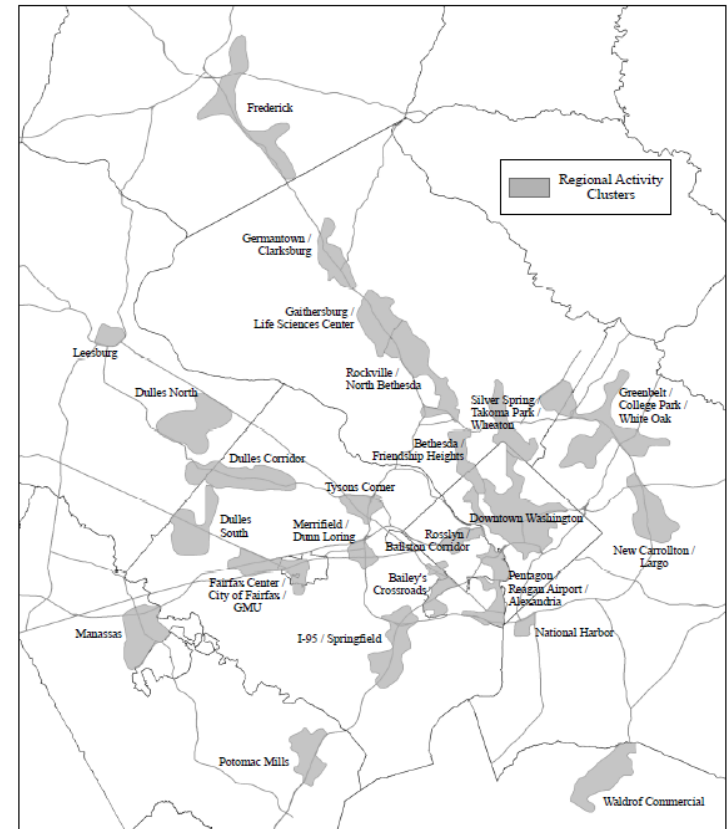


TPB Modeled Area (source: RTDC + ArcGIS On-Line)



# Survey Design (2)

- Households in higher density, mixed-use RACs with good transportation access will be surveyed at a higher rate than households in lower density suburban and exurban areas that tend to be much more homogenous in their daily travel patterns
- Address-based sample using USPS computerized delivery sequence file of residential addresses within each stratum (COG/TPB staff will provide to contractor)



Regional Activity Clusters



# Survey Design (3)

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- Household interviews over 12-month period, equally distributed over weekdays, excluding holidays
- Offer monetary incentives to encourage survey participation and provided upon full household completion
- Special outreach for participation of Hispanic, minority, and low-income households
- Household recruitment via mail
- Household data retrieval via automated web-based system, but also telephone option
- Basic household, person, and vehicle data for all recruited households

# Survey Design (4)

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- Detailed data on daily travel behavior for specified 24-hour weekday period for all persons in surveyed household
  - All trips made, places visited, modes of travel for each trip segment, trip purpose, activities carried out at home and other places
- Travel day diaries or memory joggers used as aid for respondents
- Address information obtained during survey interviews geocoded to x-y coordinates in real time where possible, or researched and geocoded within 48 hours



# Survey Design (5)

- Minimize respondent burden
- Give respondent opportunity to verify and correct information provided, if necessary
- Survey pre-test evaluates passive data collection of daily travel behavior using GPS data loggers or smart phones
- Conduct follow-up survey of non-responding households to identify and measure potential non-response bias in main survey



Pike and Rose TOD under construction  
near White Flint Metrorail, Montgomery County, MD



# Scope of Work (1)

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- Consultant work plan
- Refined survey design and technical memorandum
- Review pre-test survey sample
  - Pre-test must yield 800 completed households
    - Completed household = interviewed household for which completed travel day information obtained for 100% of household members
  - Half of pre-test sample for web-based data retrieval
  - Half of pre-test sample for determining efficacy of GPS data logger or smart phone data capture
  - Target allocations for pre-test based on geographic and area type strata



# Scope of Work (2)

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- Develop survey interviewing plan, materials, and data collection systems for survey pre-test
- Conduct survey pre-test; evaluate survey pre-test results
  - Compare GPS / smart phone data with non-GPS / non-smart phone retrieved data
- Refine survey methods, materials, and procedures for main survey
- Conduct main survey
  - Target allocations for main survey based on geographic and area type strata



# Scope of Work (3)

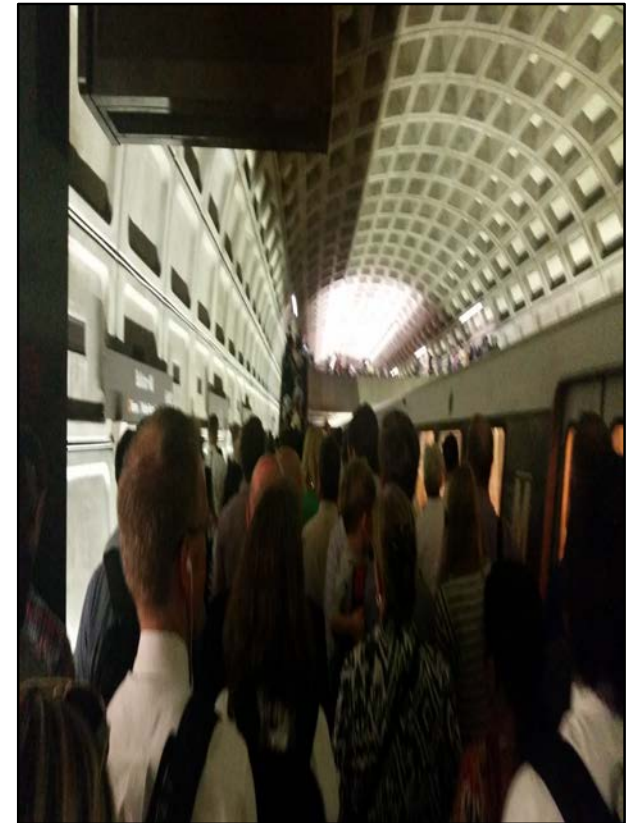
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- Analyze non-responding households and follow-up survey
  - 100 non-responding households that were selected for participation in the main survey but did not respond to the invitation
  - 100 non-responding households that initially agreed to participate in the main survey but did not fully complete the household / person / travel day interviews
- Prepare final survey report and data files
  - Raw and final, edited, geocoded household, person, vehicle, trip/ activity survey data files and associated documentation including all interviewing scripts
  - Final non-response follow-up survey files and documentation
  - Initial household expansion weight for each completed household in survey data file
    - Staff will develop final household, person, and trip weighting factors



# Anticipated Survey Schedule

- Subject to refinement with contractor
- Kick-off: August 2016
- Survey pre-test: late Fall 2016
  - Following election but before major holidays (Thanksgiving, Christmas, New Year's Day)
- Main survey: Spring 2017
  - Following WMATA SafeTrack surges (Surge #15 scheduled to conclude on March 19, 2017)
- Complete main survey: Spring 2018
- All deliverables by June 30, 2018



Crowding at outbound platform  
Ballston-MU Metrorail Station, July 20, 2016

# Current Project Status

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- RFP 16-025 released June 9
- Pre-bid conference held at COG/TPB offices on June 15
- Proposals were due on July 8 at 2pm
  - Six proposals were received
- TSC with representatives from VDOT, MDOT, DDOT, WMATA, and COG/TPB staff convened to review proposals on July 20
  - TSC reached consensus on a winning proposal



# Next Steps and Next Report to TFS

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- Finalize consultant selection and contract by early August
- Project kick-off by mid-August
- Survey project information update / status report at September TFS meeting and subsequent TFS meetings until conclusion of survey in summer 2018
- Special thanks to TSC members
- Special thanks to Robert E. Griffiths, Planning and Programming Director (retired, but serving as special advisor to the 2017-2018 Regional Household Travel Survey)



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