Briefing on Household Travel Characteristics and Behavior in Seven Focused Geographic Subareas of the Region

Staff Recommendation: Receive briefing on selected slides (2, 4, 12, 13, 14, 22, and 23) from the attached Power Point presentation on the initial results from household travel surveys conducted in seven focused geographic subareas of the region.

Issues: None

Background: In the spring of 2012, 2,700 households in seven focused geographic subareas were surveyed to obtain demographic information and travel characteristics of the residents. The subareas surveyed include:

1. New York/Rhode Island Ave NE Corridor in the District of Columbia
2. Friendship Heights in the District and Montgomery County,
3. East & West Falls Church Metrorail station areas in Falls Church, Arlington County and Fairfax County,
4. Beauregard Corridor in the City of Alexandria,
5. National Harbor/Oxon Hill area of Prince George's County,
6. Dulles North area in Loudoun County
7. St. Charles/Waldorf area in Charles County.

2012 TPB Geographically-Focused Household Travel Surveys Initial Results

Robert E. Griffiths
Technical Services Director

National Capital Region Transportation Planning Board
March 20, 2013

Project Background

- Follow-on to 2007-2008 TPB Regional Household Travel Survey that was primarily conducted for the development of the new travel demand model

- Household Travel Survey data collection in specific geographic sub-areas of the region (Case Studies)

- Addresses a need expressed by local planners

- Will provide some current small area community-level socio-economic data that are no longer available from the Decennial Census

Project Objectives

- Analyze daily travel behavior in communities with different densities, physical characteristics and transportation options

- Support refinement of TPB Travel Model

- Assist local planners with current local land use and transportation planning efforts

- Build a household travel survey database that can measure changes in local community travel behavior over a period of time (Before and After comparisons)

# Now Have Collected Survey Data in 17 Focused Areas
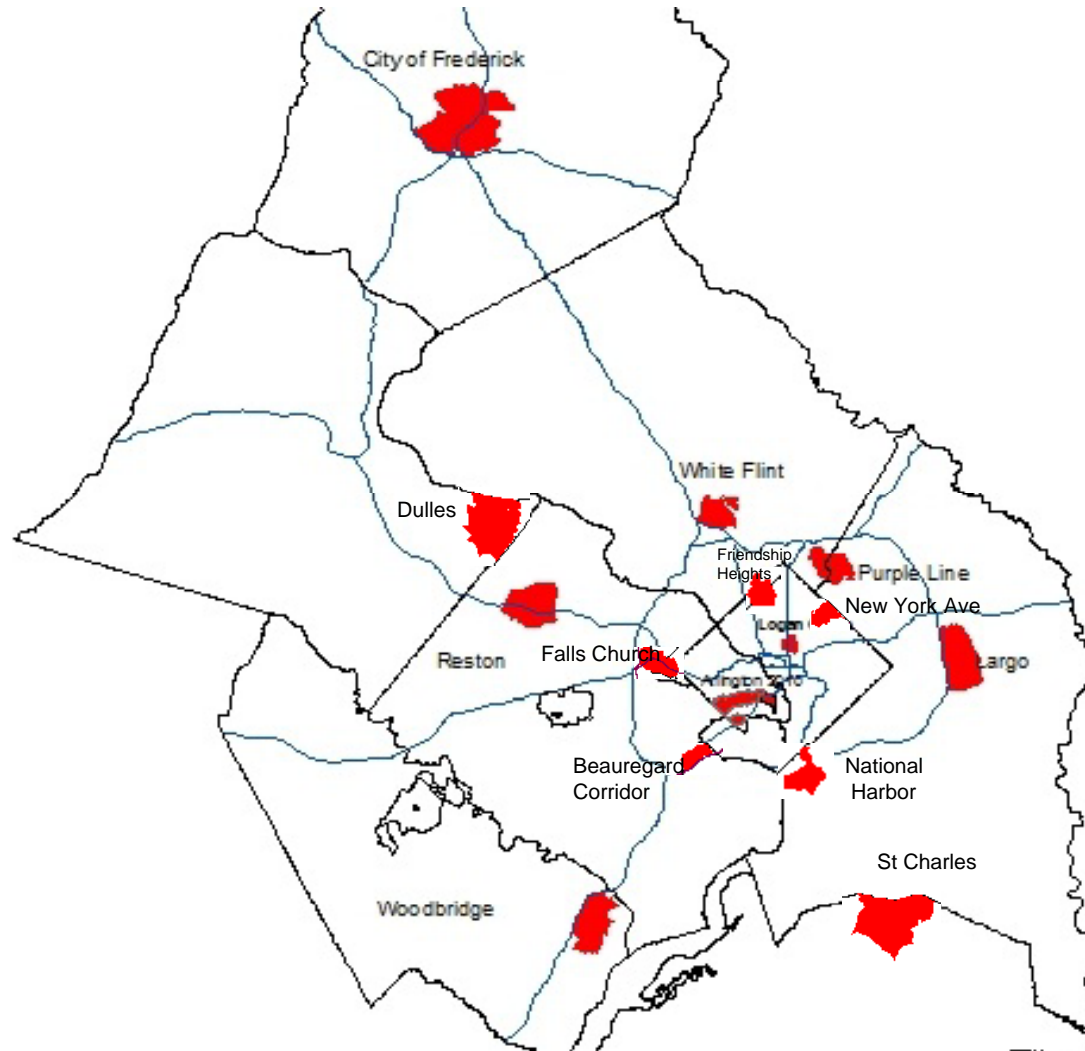
Spring 2012 TPB Surveys in Seven Areas

The seven areas surveyed in the spring of 2012 are:

- <u>New York/Rhode Island Avenue NE Corridor</u> in the District of Columbia
- <u>Friendship Heights</u> in the District of Columbia and Montgomery County, Maryland
- <u>East Falls Church and West Falls Church Metrorail Station areas</u> in Arlington County, the City of Falls Church and Fairfax County, Virginia
- <u>Beauregard Corridor</u> in the City of Alexandria, Virginia
- <u>National Harbor/Oxon Hill area</u> in Prince George's County, Maryland
- The <u>Dulles North</u> Area in Loudoun County, Virginia
- <u>St. Charles/Waldorf</u> Area in Charles County, Maryland

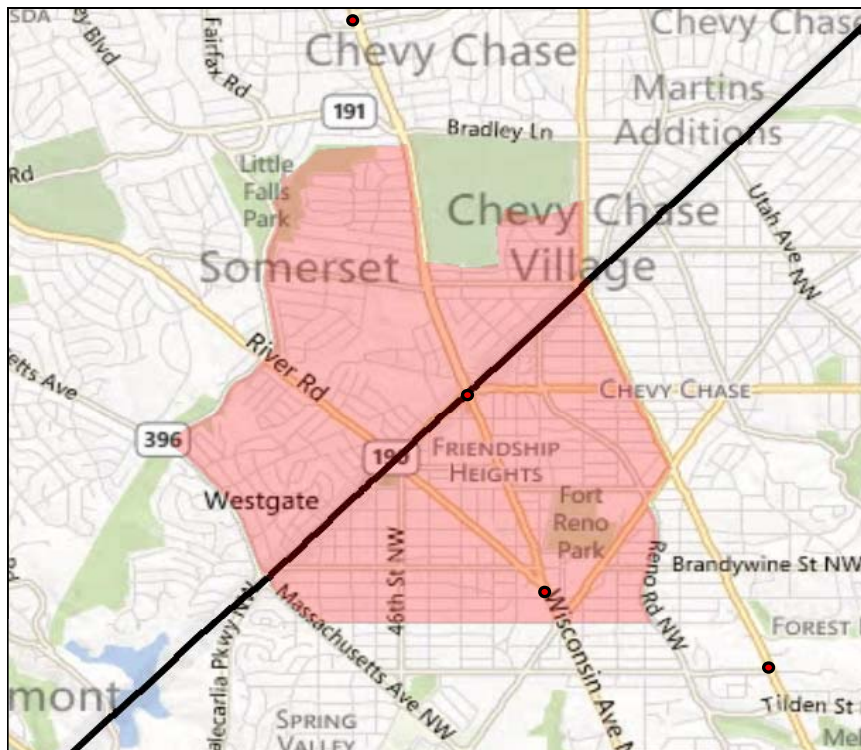# New York/Rhode Island Avenue NE Corridor in the District of Columbia
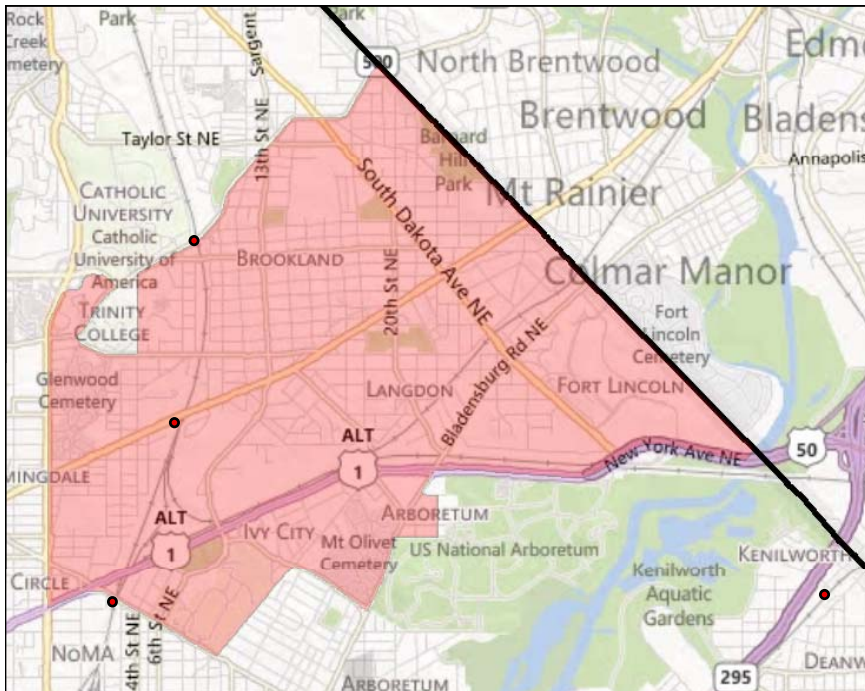
Notable Features:

Land Area	=	5.3 sq mi
Households	=	14,100
HH Population	=	35,200
Pop Density	=	6,600 persons/sq mi

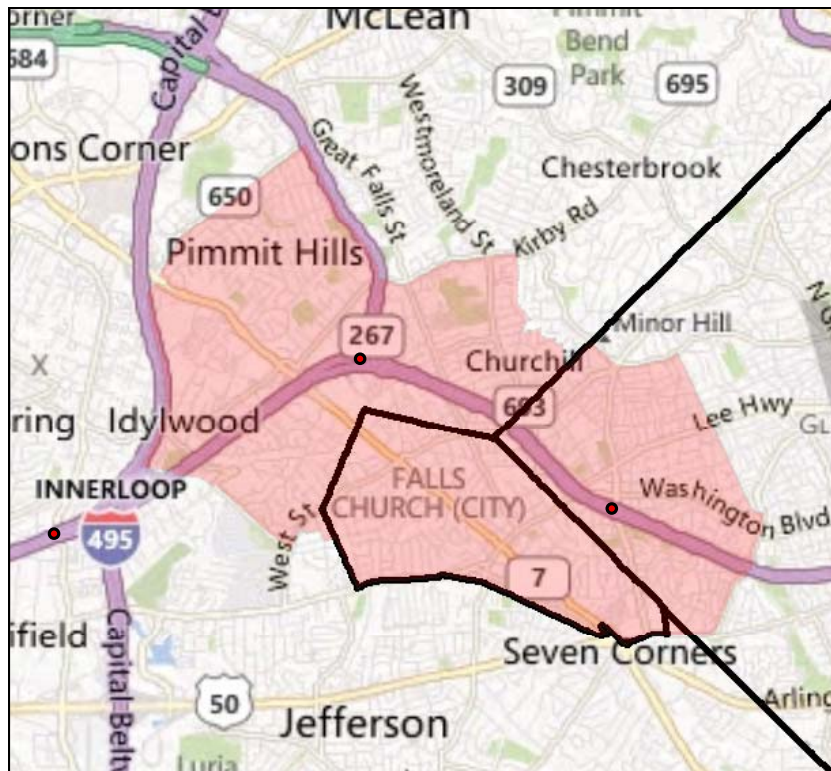# Friendship Heights in the District of Columbia and Montgomery County

Notable Features:

Land Area	=	2.8 sq mi
Households	=	10,800
HH Population	=	23,900
Pop Density	=	8,500 persons/sq mi

East Falls Church and West Falls Church Metrorail Station Areas

Notable Features:

Land Area	=	8.4 sq mi
Households	=	18,900
HH Population	=	48,000
Pop Density	=	5,700 persons/sq mi

Beauregard Corridor in Alexandria

Notable Features:

Land Area	=	2.3 sq mi
Households	=	15,700
HH Population	=	33,000
Pop Density	=	14,300 persons/sq mi

8
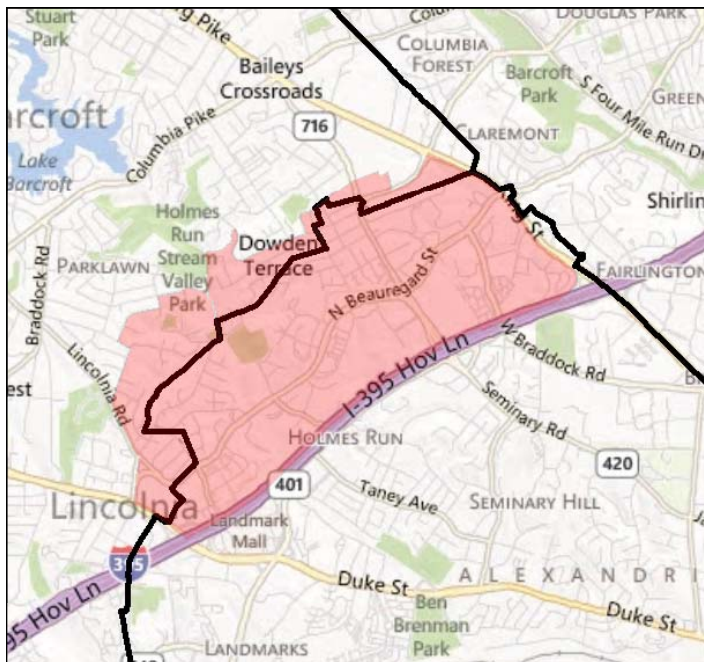
National Harbor/Oxon Hill in Prince George's County
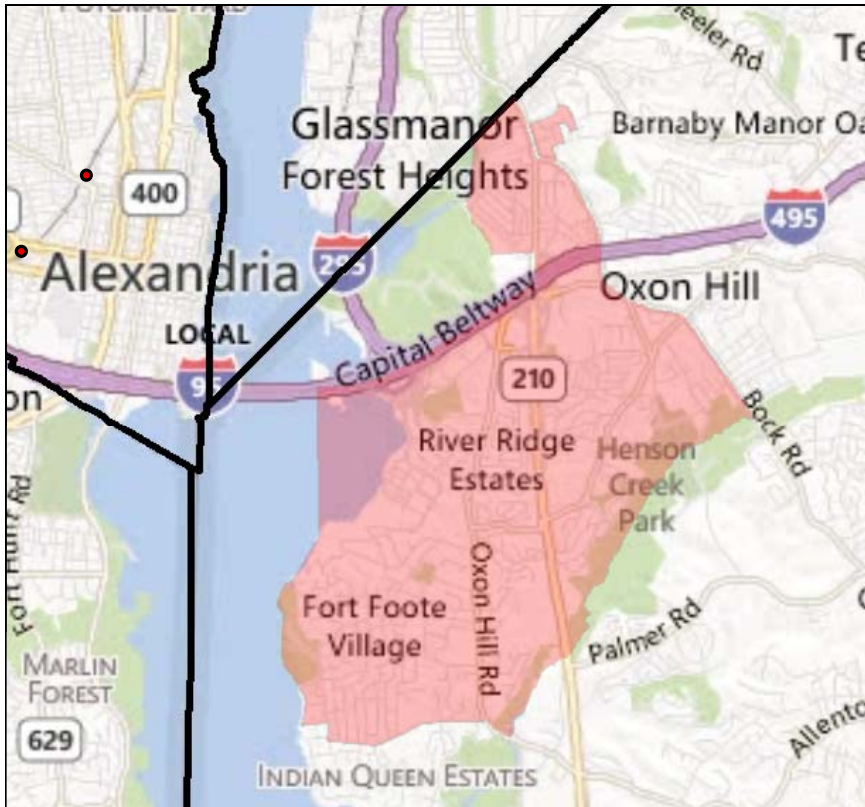
Notable Features:

Land Area	=	6.3 sq mi
Households	=	6,900
HH Population	=	18,900
Pop Density	=	3,000 persons/sq mi

Dulles North Area in Loudoun County
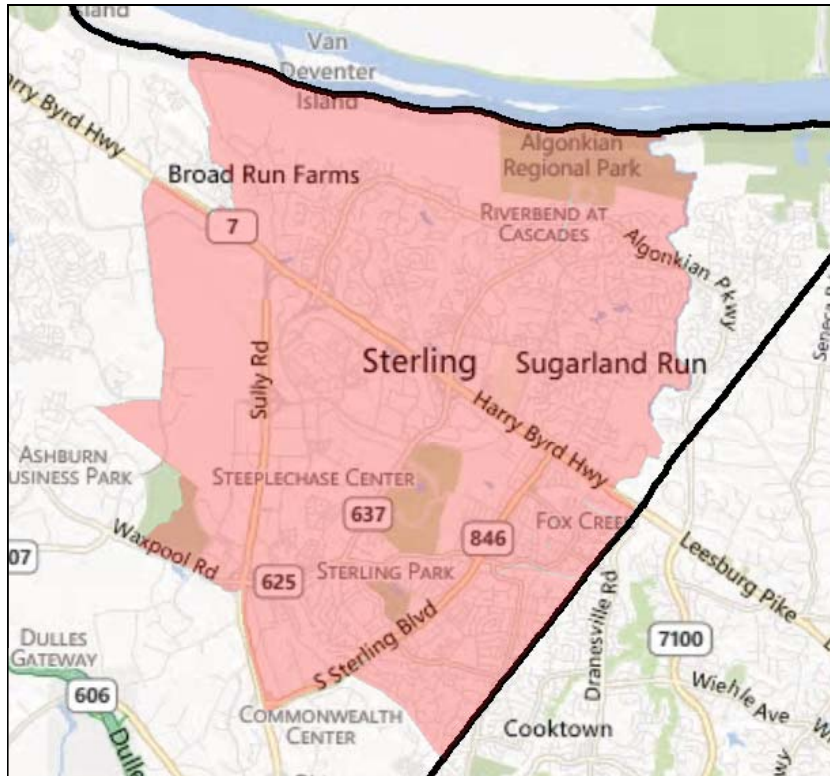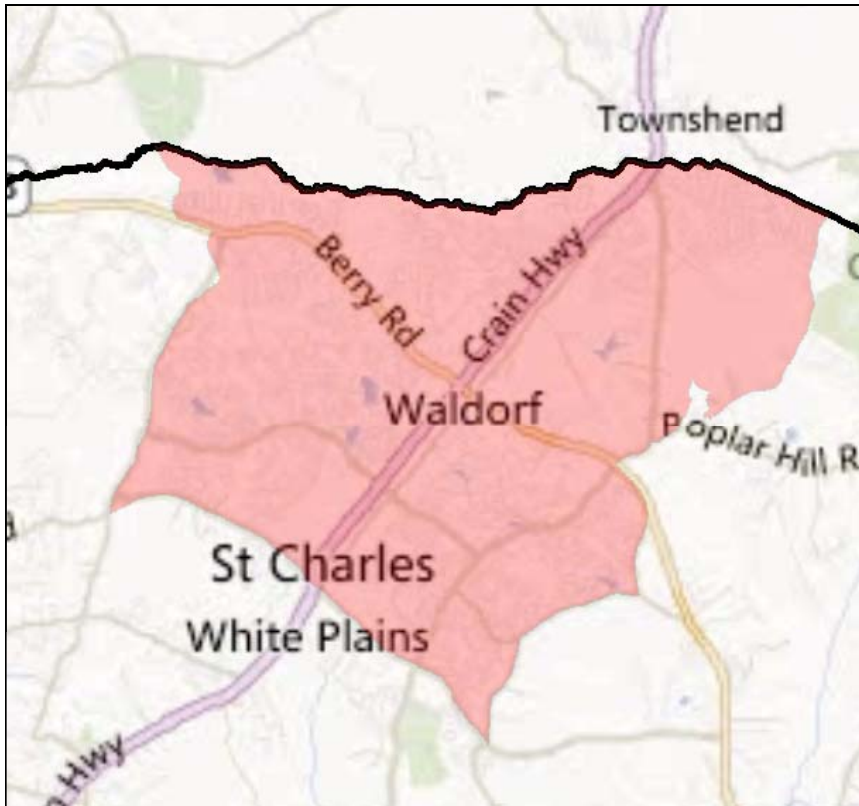

Notable Features:

Land Area   =   20.3 sq mi
Households   =   22,900
HH Population   =   67,400
Pop Density   =   3,300 persons/sq mi

St. Charles/Waldorf Area in Charles County

Notable Features:

Land Area	=	23.9 sq mi
Households	=	22,800
HH Population	=	65,000
Pop Density	=	2,700 persons/sq mi

Household Demographics

Survey Area	Live in Apt or Condo	1-Person HH	2+Worker HH	One or More Children	No Car	3+ Cars
NY/RI Ave NE	43%	56%	19%	13%	33%	6%
Friendship Heights	43%	38%	28%	15%	12%	7%
E &W Falls Church	27%	28%	35%	27%	2%	15%
Beauregard Corridor	78%	57%	24%	12%	11%	4%
National Harbor	21%	32%	28%	18%	7%	21%
Dulles North	19%	24%	44%	33%	1%	27%
St. Charles/Waldorf	12%	28%	34%	26%	4%	27%
Regional Average	**23%**	**28%**	**43%**	**37%**	**4%**	**21%**

Daily Modal Shares – All Weekday Trips

Survey Area	Drive Alone (SOV)	Carpool (HOV2+)	Transit	Walk	Bike	Other
NY/RI Ave NE	33%	23%	17%	22%	1.9%	4%
Friendship Heights	34%	21%	12%	29%	2.4%	2%
E &W Falls Church	42%	31%	7%	16%	1.7%	3%
Beauregard Corridor	46%	22%	10%	19%	1.0%	3%
National Harbor	49%	34%	4%	11%	---	3%
Dulles North	51%	34%	2%	8%	0.8%	5%
St. Charles/Waldorf	49%	34%	3%	7%	0.5%	5%
Regional Average	**43%**	**37%**	**6%**	**9%**	**0.5%**	**4%**

Commuting Trip Modal Shares

Survey Area	Drive Alone (SOV)	Carpool (HOV2+)	Transit	Walk	Bike	Other
NY/RI Ave NE	45%	11%	35%	4%	3.9%	1%
Friendship Heights	41%	9%	37%	8%	3.7%	1%
E & W Falls Church	57%	13%	22%	2%	3.6%	2%
Beauregard Corridor	57%	10%	23%	4%	2.8%	3%
National Harbor	74%	10%	14%	---	---	2%
Dulles North	82%	9%	5%	2%	0.3%	2%
St. Charles/Waldorf	72%	15%	11%	1%	---	1%
Regional Average	**70%**	**8%**	**18%**	**3%**	**0.6%**	**1%**

Initial Findings: NY/RI Ave NE Corridor

- **Area Characteristics:**
  - 43 % of households living in apartments or condos
  - 56 % single person households / 19% 2+-workers/ 13% with children
  - 33% of no car households / 6% 3+ vehicle households
  - Served by Metrobus and the NY Ave, Rhode Island Ave and Brookland Metrorail Stations
  - Near Gallaudet, Trinity University and Catholic Universities

- **Transportation Behavior**
  - 33% daily SOV mode share is about 25% less than the regional average
  - 22% daily walk mode share is more than twice the regional average
  - 17% daily transit mode share is about 3 times the regional average
  - 1.9% daily bike mode share is about 4 times the regional average

Initial Findings: Friendship Heights

- **Area Characteristics:**
  - 43 % of households living in apartments or condos
  - 38 % single person households / 28% 2+-workers/ 15% with children
  - 12% of no car households / 7% 3+ vehicle households
  - Served by Metrobus. Ride-On and the Friendship Heights and Tenelytown Metrorail Stations
  - Near American University

- **Transportation Behavior**
  - 34% daily SOV mode share is about 25% less than the regional average
  - 29% daily walk mode share is more than 3 times the regional average
  - 12% daily transit mode share is twice the regional average
  - 2.4% daily bike mode share is about 5 times the regional average

Initial Findings: East-West Falls Church

- **Area Characteristics:**
  - 73 % of households living in single-family houses
  - 28 % single person households / 35% 2+-workers/ 27% with children
  - 2% no-car households / 15% 3+ vehicle households
  - Served by Metrobus, ART, Fairfax Connector and the East and West Falls Church Metrorail Stations

- **Transportation Behavior**
  - 42% daily SOV mode share is about the regional average
  - 16% daily walk mode share is 1.8 times the regional average
  - 7% daily transit mode share is about the regional average
  - 1.7% daily bike mode share is more than 3 times the regional average

Initial Findings: Beauregard Corridor

- ## Area Characteristics:
  - 78 % of households living in apartments and condo
  - 57 % single person households / 24% 2+-workers/ 12% with children
  - 11% no-car households / 4% 3+ vehicle households
  - Served by Metrobus and DASH, but not directly served by a Metrorail Station

- ## Transportation Behavior
  - 46% daily SOV mode share is slightly above the regional average
  - 19% daily walk mode share is twice the regional average
  - 10% daily transit mode share is 1.7 times the regional average
  - 1% daily bike mode share is twice the regional average

Initial Findings: National Harbor/Oxon Hill

- **Area Characteristics:**
  - 79 % of households living in single-family houses
  - 32 % single person households / 28% 2+-workers/ 18% with children
  - 7% no-car households / 21% 3+ vehicle households
  - Served by Metrobus, but not directly served by a Metrorail Station

- **Transportation Behavior**
  - 49% daily SOV mode share is about 1.1 times the regional average
  - 11% daily walk mode share is 1.2 times the regional average
  - 4% daily transit mode share is 33% less than the regional average
  - Daily bike mode share is below the regional average
  - Note: the household sample size for the National Harbor/Oxon Hill area was very small, only 172 households

Initial Findings: Dulles North

- ### Area Characteristics:
  - 81 % of households living in single-family houses
  - 24 % single person households / 44% 2+-workers/ 33% with children
  - 1% no-car households / 27% 3+ vehicle households
  - Served by Loudoun County Transit Commuter Bus and Virginia Regional Transit

- ### Transportation Behavior
  - 51% daily SOV mode share is about 1.2 times the regional average
  - 8% daily walk mode is about the regional average
  - 2% daily transit mode share is 67% less than the regional average
  - 0.8% daily bike mode share is slightly above the regional average

Initial Findings: St Charles/Waldorf

- <u>Area Characteristics</u>:
    - 88 % of households living in single-family houses
    - 28 % single person households / 34% 2+-workers/ 26% with children
    - 4% no-car households / 27% 3+ vehicle households
    - Served by MTA Commuter Bus Service and VanGo

- <u>Transportation Behavior</u>
    - 49% daily SOV mode share is about 1.1 times the regional average
    - 7% daily walk mode is slightly below the regional average
    - 3% daily transit mode share is half the regional average
    - 0.5% daily bike mode matches the regional average

General Findings and Initial Conclusions:

- The <u>NY/RI Ave NE</u>, <u>Friendship Heights</u>, and <u>Beauregard Corridor</u> areas with significant transit, walk and bike mode shares, had higher proportions of households living in apartments and condos, fewer households with children and good proximity to frequent transit service

- The <u>National Harbor</u>, <u>Dulles North</u> and <u>St Charles/Waldorf</u> areas with SOV mode shares above the regional average and transit mode shares below the regional average, had higher proportions of households with 2+ workers and children living in single-family homes and less direct access to frequent transit service.

- The <u>East & West Falls Church</u> area is interesting because it had household demographic characteristics closer to the Dulles North and St Charles areas, but had daily transit, walk and bike modal shares above the regional average. Although the proportion of households with multiple workers and with children was about the same as in the Dulles North and St Charles areas, residential densities, the proportion of households living in apartment and condo, and proximity to more frequent transit was higher in the Falls Church survey area.

Challenges For Regional Activity Centers:

- Higher density areas with good proximity to frequent transit service, like NY/RI Ave NE, Friendship Heights and Beauregard, predominately serve one and two person households without children. The challenge for the future is how to provide more "family friendly" housing, amenities and services in the region's activity centers.

- In the region's lower density areas that are expected to become higher density activity centers in the future, the challenge is to continue to maintain the "family friendly" amenities and services while increasing residential density and providing more frequent and supportive transit service.

23

2013 Data Collection -DC

Four areas in the District to be surveyed in 2013 are:

- Federal Center/Southwest/Navy Yard

- H Street NE Corridor

- St. Elizabeth's / Anacostia

- Fort Totten

2013 Data Collection - MD

Four areas in the Maryland to be surveyed in 2013 are:

- Silver Spring in Montgomery County

- Hyattsville/College Park in Prince George's County

- Greenbelt in Prince George's County

- Kentlands in Montgomery County

2013 Data Collection - VA

Four Areas in Virginia to be surveyed in 2013 are:

- City of Fairfax

- City of Manassas

- Tysons in Fairfax County

- Leesburg in Loudoun County